

Preparatory study for an Impact Assessment concerning the possible revision of the legislative framework on the posting of workers in the context of the provision of services

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LIST OF ABBREVIATIONS

- EC European Commission
- ECJ European Court of Justice
- EPI Employment protection index provided by OECD
- EU European Union
- GDP Gross domestic product
- Mkt Market (in tables)
- MS(s) Member State(s)
- OECD Organisation for Economic Co-operation and Development
- PWD Posting of Workers Directive 1996/71/EC
- TFEU The Treaty on the Functioning of the European Union

EXECUTIVE SUMMARY

The Report aims to assess the impact of six Policy options identified by the EC to modify the current regulatory setting of posting at EU-level.

The PWD introduced in 1996 had two objectives: to overcome the ambiguities and uneven regulation of national legislative provisions that applied to posted workers; and to strengthen the protection of posted workers.

Compared to the uncertain and fragmented framework existing before its introduction, the PWD establishes a more transparent, less restrictive and more favourable environment for the transnational provision of services and ensures that posted workers benefit from a core of minimum protections applicable in the country where the posting is performed, as long as such rules provide better conditions than those guaranteed in the 'country of origin'.

Besides this positive contribution to economic integration and social cohesion of the PWD, the posting of workers remained to a limited extent a controversial tool.

The analyses of the literature complemented by a set of national case studies allow identifying the main legal and administrative problems related to posting and their impact on the free market of services:

- Ambiguities in the definition of posting, referring to its 'temporary' nature;
- Ambiguities in the identification of the conditions applicable to posted workers, which refer to the scope of collective bargaining in defining the minimum protections of art. 3.1 PWD and to identification of the minimum pay rates;
- Potential protectionist extension of national legislation, which relates to the application
 of 'public policy provisions' that protect national actors and hamper the transnational
 provision of services;
- Administrative barriers created by national administrative controls and requirements imposed by MSs on posting firms that result in unnecessary burdens;
- Weak monitoring and enforcement due to the limited effectiveness of the national mechanisms of enforcement and to insufficient international cooperation on the application of the PWD.

These problems have been analysed in the light of the following economic and social issues in order to verify the room of manoeuvre for improving the regulatory framework of posting:

- The integration and development of the single market of services, to achieve the full exploitation of the potential of posting for economic growth;
- Employment and labour market issues in terms of job creation and wages and working conditions of both domestic and posted workers;
- The protection of workers' rights, related to the risk of social dumping;
- Controversies on the role of collective bargaining.

Statistical and econometric analyses and the case studies have identified the extent of posting, its main features and drivers in order to define the specific features of the problems and outline the objectives and scope of the desirable revisions.

The national case studies have been selected to include the main countries in terms of inward and outward flows of posting and to cover the most significant typologies of national institutional arrangements¹.

The study main results are:

- Posting is a well-rooted component of the internal market, although it has a limited relevance for labour markets (1-2% of the workforce). It supports economic activities and competitiveness of firms.
- Posting tends to be less problematic from a sending perspective. In economic terms, 'regular' posting produces a number of positive impacts on the sending economy and does not seem to be a potential source of social tension and conflict. Benefits linked to the status of 'expatriate' (skilled workers) or to the minimum protection applicable in the receiving MSs (unskilled workers) are also often available to posted workers and may represent a better alternative than those offered in the national labour market (with a positive impact on social as well as territorial cohesion).
- Legal problems are transversal since they can affect all MSs. However, they become more relevant in some receiving countries, especially if characterised by high labour cost.
- The main social issue concerns the question of social dumping and the protection of worker rights mainly linked to abuse and violations of the present regulatory framework.
- Implementation and enforcement problems emerge in countries with high labour costs especially from a receiving perspective. In fact, the attractiveness of posting from low-labour cost to high-labour cost countries can foster opportunistic behaviour by circumventing national regulations through 'fake' or 'borderline' postings, as in the case of 'letterbox companies', or through an outright disregard of the rules on posting. Such behaviours, which appear to be linked to posting opportunities in high-labour cost countries, also involve and affect sending and often low-labour cost countries. This is relevant both for the emerging issue of effective transnational enforcement and for the potentially negative consequences for employment and working conditions of workers posted abroad.
- Industrial relations and the role of trade unions significantly contribute to the monitoring
 of employment and working conditions of posted workers at workplace level, although
 their capacity to represent posted worker and to regulate their terms of employment faces
 some legal and practical limitations.

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¹ The case studies cover countries with a significant national debate on posting, Germany, Denmark, France and the UK, as well as two examples of monitoring tools on posting, LIMOSA in Belgium and RUT-Register in Denmark.

- National stakeholders (public authorities, employers and employer associations, trade
 unions) have different views, both within and across countries, on the actions that should
 be taken concerning the regulation of posting. However, the need to improve
 enforcement of the rules on posting and transnational administrative cooperation
 emerges as common concerns, even if proposed solutions differ greatly.
- Although data is very fragmentary, there indications that SMEs tend to be significantly affected by posting. For instance, data on the average number of posted workers per posting in France and Denmark suggest that SMEs can have an important role in a sending perspective, also through subcontracting chains in the engineering and construction sector. In this way, posting can enable SMEs to exploit the learning potential attached to business growth and consolidation in foreign markets, thereby contributing to the integration of the market of services. At the same time, the concerns expressed by SME representatives in certain cases, in a receiving perspective (again especially in France and Denmark), point to the high competitive pressure that foreign firms using posted workers can exert on SMEs only by exploiting lower wage levels and lower social security contributions obligations. This position underlines the importance of enforcement with a view to ensure fair competition.
- According to the case studies, monitoring tools seem to significantly contribute to
 enhance the effectiveness of regulation and inspections and do not seem to entail relevant
 barriers or obstacles to the transnational provision of services. If appropriately devised
 they may effectively reduce the administrative burdens and obligations for firms now
 imposed by different national arrangements.

In sum, the present regulatory setting is conducive to market integration and provides significant protection of workers. Problems and issues are particularly relevant in a small number of high-labour cost countries, with monitoring and enforcement emerging as a crucial weakness of the present situation. In a broader sense, such problems also involve the other Member States, especially in a sending perspectives, both in view of and effective transnational enforcement of regulations and protection of posted workers.

After the analysis of the present situation, the study focuses on the policy options to verify their ability to offer a solution to the problems.

Initially, the content of each Policy option has been defined with the help of legal studies focussed on each of the legal and administrative problems identified above, with a view to identify the measures better suited to achieve the regulatory objectives.

Policy options have been analysed in terms of their capacity to address the problems and issues and to reach the general objectives of fostering economic integration and strengthening social cohesion.

The impact assessment of these policy options can be summarized as follows:

- Policy options 1 and 2 are similar as they do not substantially change the regulatory setting and rely on the pressure of EU institutions and on national initiatives, both unilateral and multilateral, to improve monitoring and enforcement. These options do not involve a worsening of the present situation, but they can achieve only minor or negligible improvements in economic integration and social cohesion. Therefore, they are not able to provide a significant solution to the main problems that have emerged.
- Policy options 3 and 4 are similar since they address the same issues (monitoring and enforcement) by different regulatory instruments (through amending the Directive or with a new Directive). Since their difference cannot generate significantly different results on the content of the Directive, their impact on enforcement is the same in both cases.
- Policy option 5 considers a broad area of intervention. Even if an accurate selection of the
 content of the policy option can address all regulatory issues, from an economic and
 social point of view, the higher constraints on posting and the increase in uncertainty
 implied by this intervention have an ambiguous unpredictable impact on economic
 integration.
- Policy option 6, by repealing the PWD, creates a situation of high uncertainty that is expected to exacerbate all the problems and may create new ones, with negative impacts on both economic integration and social cohesion.

In sum, while Policy options 1 to 4 seem to offer some scope for addressing the problems and issues related the posting of workers, although to a different extent and with distinct administrative costs and degrees of feasibility, Policy option 5 and 6 do not represent viable solutions.

INTRODUCTION

The posting of workers abroad represents a fundamental instrument for enhancing the transnational operation of service firms, since in many cases services require the presence of the provider's workers on the customers' site. As a consequence, the posting of workers is a key component of the development of the internal market for services in the EU and the definition of a clear set of rules concerning the posting of workers is an essential requirement for the achievement of one of the fundamental objectives of the EU. Besides this goal, the PWD addresses the issue of the protection of posted workers and thereby contributes to the establishment of an internal market which is based on a highly competitive social market economy, aiming at full employment and social progress (Article 3(3) TEU).

In view of the full implementation of the single market, the transnational provision of services significantly complements the free circulation of goods, capital and labour across EU MSs. The transnational provision of services is meant to strengthen the European economy by increased fair competition among firms and enhanced firm competiveness. In particular, the posting of workers can support firm competitiveness through greater allocative efficiency of factors of production (for instance, by filling skill and labour shortages), improved internal efficiency implied by competition in production costs (including labour cost), and opportunities for business expansion.

All these market outcomes can have relevant positive economic and social implications in terms of economic growth, more jobs, higher wages in sending countries, and better labour mobility prospects for workers in the receiving countries. Economic integration through the transnational provision of services can in fact contribute to the establishment of a sort of 'virtuous circle' between economic growth and social cohesion. However, there are a number of potential negative impacts on both the economic and social dimensions of posting which should be carefully assessed with a view to evaluating the scope and the extent of such possible shortcomings. These include unfair competition, social dumping, and social disputes on the representation of posted workers and the collective regulation of their employment relationship.

The introduction of the PWD in December 1996 aimed at establishing a clear and definite regulatory framework to accompany the development of the provision of transnational services across EU MSs (and EEA countries), while at the same time providing posted workers with basic protections to sustain social cohesion. The main objective of the PWD was in fact two-fold: on the one hand, to overcome the ambiguities and uneven regulation of national legislative provisions that had to be applied to posted workers; on the other hand, to strengthen the protections of posted workers.

The two goals were pursued by the introduction of a EU-wide framework which combines the basic principle of the Rome I Regulation concerning posted workers (Convention 80/934/ECC on the law applicable to contractual obligations opened for signature in Rome on 19 June 1980, now in Regulation EC 593/2008 of 17 June 2008), that is the application of

"the law of the country, in which the employee habitually carries out his work in performance of the contract, even if he is temporarily employed in another country" (PWD, Recital No. 8; see Rome I Regulation, art. 8.2), with the provision that posted workers benefit of "a nucleus of mandatory rules for minimum protection" established by the country where they are posted, "whatever the law applicable to the employment relationship" (PWD, Recital No. 13 and art. 3.1,). In fact, since the PWD always preserves the more favourable conditions envisaged by the regulatory framework (PWD, art. 3.7) of the country of origin, these minimum protection measures become relevant only when they improve the position of posted workers.

Before the introduction of the PWD, most MSs used the Rome I Regulation clause, which enables countries to override the standard principles of the applicable law (Rome I Regulation, art. 9). In particular, instead of abiding by the provision on the application of the law of the 'country of origin', most MSs used to require the full application of the national labour law framework as 'mandatory provisions'.

Compared to this fragmented situation, the PWD establishes a more transparent, common, less restrictive and more favourable environment for the transnational provision of services and ensures that posted workers benefit from a core of minimum protections applicable in the country where the posting is performed, as long as such rules ensure better conditions than those guaranteed in the 'country of origin'.

After more than fifteen years of posting regulated by the PWD, the growth in the number of postings until the recent 2008 economic downturn shows progress in the integration of the market of services and the contraction during the crisis indicates that posting is already an established component of the EU economy and basically follows the overall business cycle. This also means that constraints on the utilisation of posting can reduce the overall level of economic activities, with negative consequences on economic growth and employment. The importance of geographical proximity as a driver of posting, underlined by both the aggregate analysis and the national cases, highlights the importance of posting in supporting the socioeconomic integration of cross-border regions in terms of both labour and service markets.

Posting remains at the centre of a lively debate, which especially concerns the implementation and enforcement of the PWD and a number of economic and social issues. The debate emphasizes the controversies over the effects of posting on the local labour markets and industrial relations systems, especially in receiving countries, and the need for a more effective regulation of the phenomenon.

With a view to supporting a legislative intervention at EU level on the PWD, this preparatory study analyses the extent, features and drivers of posting as well as the benefits and costs related to posting of all the actors involved, with a view to better specify and delimit the problematic areas of the phenomenon. On these grounds, the study carries out the assessment of the Policy options identified by the EC in terms of their differential impact on the identified problems and issues and on the overall objectives of fostering market integration and strengthening social cohesion.

The study is made up of five sections. Section 1 is devoted to the analysis of posting, in order to define the problem and present the baseline scenario, which is the essential reference for the impact assessment. Section 2 specifies the objectives of the possible legislative intervention. After the discussion in Section 3 of the basic features of the different Policy options and the selection of their contents, taking into consideration the identified problems and the objectives, the assessment of the impacts is developed in Section 4. Section 5 compares the impacts and the feasibility of the Policy options.

1. PROBLEM DEFINITION

Despite the positive and well recognizable effects on economic integration, the posting of workers remains a controversial tool. Although the phenomenon has a limited overall relevance for national labour markets, a lively debate has emerged around posting. The main topics of the debate can be briefly summarised as follows:

- Trade unions have expressed criticism about the potential downward pressure that the
 posting of workers can allegedly exert on wages and working conditions in the receiving
 countries.
- The risk of 'job displacement' has been sometime referred to, but the available empirical evidence is inconclusive and negligible in aggregated terms. Certainly, social conflicts emerged around the issue of competition for jobs between posted and indigenous workers like in the case of the postings to the Lindsey oil refinery in the UK and the public debate in all the countries covered by case studies refer to the presence of competition on labour costs and wages in particular.
- It should be clear that, as long as all legislative provisions are respected, including the PWD, competition on labour costs is part of the transnational provision of services, like it happens in the case of trade in goods. Moreover, it should also be considered that some of these potential effects on local labour markets, like the downward pressure on wages, often find much stronger roots in other phenomena, like migration, which appear to be both more pervasive and more sizeable.
- In many countries, the debate on posted workers tends to overlap with that on migrant workers, for a number of practical issues, including the difficulties in distinguishing between the two groups of workers, especially in certain organisational settings, such as building sites. However, a separate analysis of the phenomenon of posting is crucial, since they have very different drivers.
- Another criticism, which has been voiced by trade unions, concern the limitations which they see in the scope of collective regulation of the terms and conditions of employment of posted workers by industrial relations allowed by what they consider the 'restrictive' reading of the PWD made by the ECJ in some well-known cases (especially in Laval case²). According to this position, minimum protections set by collective agreements would be relevant only when such accords are 'universally binding', otherwise they will not pass the 'non-discriminatory test' (PWD, art.3.8). Of foremost importance, trade unions have to face some limitations in the use of strike in direct negotiations with the posting firms in the receiving country. If they stage industrial action, they may be sanctioned for unlawfully hampering the freedom of transnational provision of services when the posting firms meet the minimum protection levels set in the relevant national legislation (see Laval case).
- In some cases a distorted use of the posting of workers produces controversial situations. This is the case, for instance, of the so-called 'letterbox companies' which post workers

² Laval und Partneri, ECJ case C-341/05, Judgement of 18 December 2007.

abroad but do not appear to be genuinely established, since alleged posted workers do not 'habitually work' in the sending country. Other problems may refer to the qualification of the temporariness of the relevant provision of services, since no maximum duration is envisaged in the PWD.

- The transposition of the PWD into the national regulatory framework may cause some problems, especially when the extension of national rules is broad and the use of the 'public policy provision' is extensive (PWD, art.3.10).
- Finally, a number of administrative issues have emerged which refer to the presence of
 possible barriers to the transnational provision of services and to the establishment of an
 effective system to enforce the PWD through national inspection services and
 international administrative cooperation.

In order to select the relevant issues in this broad and complex debate, it is necessary to:

- Illustrate the current regulatory setting.
- Analyse the relevant legal and administrative problems as well as the economic and the social issues related to posting.
- Develop a baseline scenario which outlines the nature and extent of posting in the EU, identifies the main drivers of the phenomenon and the costs and benefits for the actors involved.

These three steps, which are presented in this section, provide the essential reference to specify the objectives of a possible legislative intervention at EU level (Section 2), develop and specify the contents of the Policy options identified by the European Commission (Section 3), and finally carry out their comparative assessment (Sections 4 and 5).

Finally, in order to support all the analytical step of the studies, a number of in-depth case studies at national level have been carried out, both on posting (Denmark, France, Germany, and UK) and on national monitoring tools (Belgium and Denmark). These countries cover together around 50% of all EU postings in the 2007-2009 period. Moreover, they reflect the variability of national institutional settings across the EU in the field of industrial relations and represent significant cases of implementation of the PWD and monitoring of posting. The summaries of the case studies are provided in Annex C, focussed on monitoring tools, and Annex E.

1.1 THE CURRENT REGULATORY SETTING

The Posting of Workers Directive 1996/71/EC "aims to reconcile the exercise of companies' fundamental freedom to provide cross border services under Article 56 TFEU (ex 49 EC), on the one hand, with the appropriate protection of the rights of workers temporarily posted abroad to provide them, on the other" (European Commission 2006).

The Directive regulates different situations involved in the notion of posting of workers. According to article 1.3, the posting may be realised when undertakings established in a MS in the framework of the transnational provision of services:

- Post workers to the territory of a MS under a contract concluded between the undertaking making the posting and the party for whom the services are intended (Article 1.3 (a).
- Post workers to an establishment or to an undertaking owned by the group in the territory of a MS (Article 1.3(b).
- Being a temporary employment undertaking or placement agency, hire out workers to a user undertaking established or operating in the territory of a MS (Article 1.3(c).

By the Directive, "the EU wishes to remove the uncertainties and obstacles impeding the free provision of services by increasing legal certainty and making it easier to identify the working conditions in the MS to which the worker is posted which apply to posted workers". In this sense, as far as employment and working conditions are concerned, the Directive envisages "a nucleus of mandatory rules for minimum protection to be observed in the host country by employers who post workers to perform temporary work in the territory of a MS where the services are provided" (96/71/EU, point 13 in the preamble). Article 3.1 of the Directive expressly lists terms and conditions of employment which compose this mandatory nucleus. Nevertheless Article 3.10 authorises the extension of this list to other issues. 'Host' MSs can request the application to posted workers of provisions from their own legal systems relating to terms and conditions of employment, other than those referred to in art 3.1, "in the case of public policy provisions" or if they are regulated by universally applicable collective contracts, without discriminating (directly or indirectly) the undertakings based in other MSs.

In the last decade, the European Commission has taken several actions with a view to assessing the implementation of the Directive and improving its effectiveness. The Communication adopted in 2003 on "The implementation of Directive 96/71/EC in the Member States" (COM(2003) 458 final of 25 July 2003) identified a number of problems caused by deficient or incorrect implementation in specific MSs. In 2006, a Communication on "Guidance on the posting of workers in the framework of the provision of services" (COM(2006) 159 final of 4 April 2006) addressed the issue of enhancing control measures, administrative cooperation and enforcement. This was followed in 2007 by a further Communication which focused on maximising the benefits and potential of the posting of workers while guaranteeing the protection of workers (COM(2007) 304 final of 13 June 2007). On 31 March 2008, the Commission released a Recommendation "on enhanced administrative cooperation in the context of the posting of workers in the framework of the provision of services". The Recommendation included the establishment of a High-Level Committee involving "the public bodies responsible for the control of the legislation in Member States that applies to posted workers, such as labour inspectorates" as well as the "social partners, in particular representatives of sectoral social partners in sectors with a high incidence of recourse to posted workers". The Commission then set up the Experts Committee on Posting of Workers in December 2008. The Council addressed the issue of the posting of workers in its conclusions of 9 June 2008, by endorsing the Commission's initiatives, and of 7 March 2011, which covered an electronic exchange system to facilitate administrative cooperation in the framework of the PWD to be experimented through the operation of a specific module of the Internal Market Information (IMI) system for information exchanges. A pilot project was then started in May 2011.

It must be underlined that the PWD does not concern the social security obligations of posted workers, which are covered by Regulation 1408/71, Regulation 883/2004 and the recent Regulation 987/2009. As a matter of fact, the definition of posting in these two domains does not overlap completely. For instance, one relevant difference refers to the temporariness of posting, which remains undefined in the case of the PWD, whereas the maximum limit for social security purposes is two years. Other conditions considered in the social security regulation are the substantial activity of the employer in the sending country or the employee attachment to the social security system of the sending country of at least one month before posting.

Finally, the scope of the PWD is related neither to the principle of internal mobility of workers and the linked national regulations on migrant workers, nor with policies aimed to tackle undeclared employment. However, since in practice, the concrete phenomenon of posting is often intertwined with labour migration and undeclared work, these dimensions should be taken into account and clearly separated.

1.2 PROBLEMS RELATED TO THE POSTING OF WORKERS WITHIN THE TRANSNATIONAL PROVISION OF SERVICES

Despite the positive effects outlined above, in the fifteen years since the PWD was passed, a number of issues have emerged both from a legal and administrative perspective and from the economic and social points of view.

Legal and administrative problems partly arise from some ambiguities in the provisions in the PWD, inadequate implementation of the PWD at national level, and difficulties in guaranteeing the effectiveness of the existing regulatory framework. These problems allow distortions or even abuse in the field of posting of workers, which cause negative economic and social effects.

The economic and social dimensions of posting are strongly interconnected as the posting of workers lies by definition at the intersection of economic integration and social cohesion. This means that both aspects have to be dealt with simultaneously and that political authorities have to find a balance between potentially conflicting issues, especially as benefits are widespread and pervasive, but not easily detected in quantitative terms, whereas costs are concentrated in specific and individual cases.

In order to identify the economic and social issues linked to the posting of workers, it is important to distinguish between cases which are associated with 'genuine' transnational provision of services and those which are the result of opportunistic and illicit behaviour, which exploit the ambiguities in the PWD or the difficulties of enforcement. A number of distortions have been reported in the literature and in national case studies, which can be

considered 'non genuine' posting, since they do not fully correspond to the legal definition of posting included in the Directive. They are essentially aimed at circumventing national labour legislations and usually involve unskilled workers coming from low labour cost countries through 'letterbox companies' or as 'bogus' foreign self-employed workers.

From the socio-economic point of view, these situations refers to the two basic elements of genuine posting: the presence of an entrepreneur who post workers abroad to achieve commercial objectives (the provision of a service) or organisational goals (intra-company postings) and the existence of a subordination link between the entrepreneur and the posted workers, which allows to consider posted workers as an integral part of the business undertaking rather than individual workers. In the case of letterbox companies, there is no independent entrepreneur and the commercial or organisational goals are only apparent. In 'bogus self employment', the subordination relationship, which characterises the position of the posted workers with respect to an intermediary or even the utilising firm, is dissimulated.

1.2.1 LEGAL AND ADMINISTRATIVE PROBLEMS

Ambiguities in the definition of posting and related distortions

In the present regulatory framework, posting is defined as the 'temporary' sending of an employee by an employer to provide 'temporarily' a service in a MS other than the one in which that employee normally works. Presently, no legal source states expressly the definition or the characters of 'temporariness' neither for the service nor for posting. This contributes to create ambiguities and favours distortions.

Temporariness of service. According to Articles 49 and 56 TFEU, the key factor for distinguishing the provision of services from establishment is the continuity of the transnational economic activity in the host MS. While the establishment in the host MS is covered by Article 49, the same activity performed on a 'temporary' basis is covered by Article 56 on the freedom to provide services. In the case of establishment the whole regulatory framework of the host MS applies, whereas in the(inherently temporary) provision of services, the application of laws of the receiving MS is incompatible with the economic freedom provided by Article 56 TFEU (mutual recognition principle) if it is discriminatory or not justified by overriding reasons of public interest and disproportionate (see: *Arblade* C-369/96 and C-376/96,*Mazzoleni* C-165/98, *Finalarte* C-49/98, 50/98, 52/98, 54/98, 68/98, 71/98, Portugaia Construcoes Lda, C-164/99). Nevertheless article 56 TFUE does not lay down any express definition of the requirement of 'temporariness' regarding services.

Lacking an express definition in the Treaty, the ECJ has gradually elaborated in its case-law general criteria for determining the 'temporariness' of a provision of services and for distinguishing it from the exercise of the freedom of establishment. These criteria have been evoked by the EC in its interpretative communications concerning the PWD (see in particular the communication on Posting of workers in the framework of the provision of services: maximising its benefits and potential while guaranteeing the protection of workers, COM[2007] 304 final). However, the ECJ's case-law presents a wide and open picture, where

the blurred boundaries between the temporary provision of services and establishment (and the same temporary nature of the posting) depend on a complex assessment of each individual case under scrutiny based on predominantly qualitative criteria.

According to ECJ case-law (*Gebhard* Case C-55/04, par. 27-28, *Schnitzer* Case C-215/01, par. 28), services within the meaning of the Treaty may cover activities varying widely in nature, also including services provided over an extended period of time, even for several years, like in the case of complex projects in the construction sector. Conversely, reiterated short services provided on a frequent or regular basis may be considered as covered by the freedom of establishment. In addition, if an activity is performed without a foreseeable and identifiable limit to its duration, such activity may fall within the coverage of the freedom of establishment, rather than within the provision of services (*Trojani*, Case C-456/02, par. 28). In general, "no provision of the Treaty affords a means of determining, in an abstract manner, the duration or frequency beyond which the supply of a service or of a certain type of service in another MS can no longer be regarded as the provision of services within the meaning of the Treaty" (*Schnitzer* Case C-215/01, par. 31). As it has been observed, "there is no magic formula for determining whether the rules on services or those on establishment apply: it has to be decided on a case-by-case basis" (Barnard 2010, p. 369).

The Services Directive 2006/123 has substantially incorporated ECJ's case-law criteria (see recital 77), defining indirectly service provision by contrast to establishment. Article 4.5 gives a formal definition of establishment as "the actual pursuit of an economic activity, as referred to in Article 43 of the Treaty, by the provider for an indefinite period and through a stable infrastructure from where the business of providing services is actually carried out". But this definition does not seem to offer additional indications compared to the ECJ's jurisprudence in order to distinguish between establishment and service provision.

Temporariness of posting. The PWD expressly requires the temporariness of the posting of individual employees (art. 2.1). However, the wording of Article 2.1, which refers to "a worker who, for a limited period, carries out his work in the territory of a Member State other than the State in which he normally works", does not contain any indication as to clearly define the temporary nature of the posting of workers. It must be underlined that the limited period of time must be defined with respect to the duration of the employment relationship with the employer. In fact, the general rules to select the law applicable to the employment contract are stated in Regulation (EC) No. 593/2008, the Rome I Regulation on the law applicable to contractual obligations. The Rome I Regulation clarifies that, with regards to an individual employment contract, work carried out in another country should be regarded as temporary, if the employee is expected to resume working in the country of origin after carrying out his tasks abroad.

Directive 96/71 interacts with these international private law provisions under the Rome I Regulation also at the level of defining the (genuine) situations of temporary postings of workers to which Article 3.1 of the Directive "superimposes – if necessary – the minimum protection of the laws of the host State upon the protection already offered under the law

applying to the contract by virtue of the Rome I Regulation" (van Hoek and Houwerzijl 2011, p. 14). In this regard, it must be noted that art. 23 of Regulation 593/2008 expressly provides that, in case of contrast between the provisions of the Regulation with other Community law laid down in relation to particular matters – as in the case of the PWD –, these latter special provisions prevail.

According to Rome I Regulation, if the employment relationship is exclusively related to the transnational provision of service without any continuation after the posting, the relevant legal framework which must be considered as applicable is the one of the host MS because the posted worker is predominantly located in the host MS where in fact he works habitually. Therefore a principle of full integration in the labour law protection system of that MS has to be recognized and enforced. In such a case, there is no reason to limit the application of the labour law of the host MS according to the rules laid down by Article 3 of the PWD.

Distortions. In this very complex juridical framework wide uncertainties are inevitable both at the interpretative and applicative (administrative and judicial) levels due to the absence of clear and precise criteria for determining the temporary nature of both service activity and posting of worker (see e.g. Carabelli 2009, p. 24; Giubboni and Orlandini 2007, Chapter 2). Such definitional problems provide fertile ground for abuse, especially in the form of fictitious triangulations to qualify as 'temporary' services which are instead permanently performed in the host MSs. This is the case for instance of the so called 'letterbox companies': the formal hiring is stipulated in a MS with low level of labour protection while the 'posted' worker actually performs is job in a receiving MS on a permanent basis. Another example of abuse is provided by the 'regime shopping' in the field of temporary agency works which source temporary workers from locations which are convenient in terms of social security to countries with more restrictive regulations. Other distortions are the utilisation of bogus selfemployment in order to avoid the protections granted by the PWD to posted workers sometimes through the intermediation of employment agencies— and the hiring of migrant workers in the receiving MS under the rules of posted workers. Reports of such practices emerged in each case study (See Annex E). These practices allow to fraudulently benefit from higher flexibility, lower labour cost (including social security), and less unionised labour force.

In principle, according to art. 49 TFEU and Directive 2006/123, it is not sufficient that a company is registered in a MS to be considered genuinely established there. The company must actually pursue an economic activity in the MS where it is registered in order to be legitimised to provide services in other MSs and to benefit of conditions set by art. 56 TFEU and the PWD. However, it is very difficult to verify in practice whether a firm is truly established in a foreign MS or not.

Ambiguities in the conditions applicable to posted workers: Minimum rates of pay

Collective agreements. Minimum rates of pay can be identified through collective bargaining. With regard to collective agreements, PWD adopts a double approach, depending on the legal effects they have within the host country:

- With regard to certain 'core' employment conditions enumerated by the Directive, universally applicable agreements must be applied to posted workers who are employed in the building sector (art. 3.1); and might be applied if the MS so decides to posted workers who are employed in other sectors too, provided this is in compliance with the Treaty provisions (art. 3.10, second indent, and art. 3.8, first sentence);
- Concerning the same core matters, non universally applicable agreements, might be applied to posted workers who are employed in all sectors, insofar as either they have a *de facto* general effect or they have been signed by most representative unions, provided such extension respect equality of treatment between national and foreign undertakings (art. 3.10, second indent, and art. 3.8, second sentence).

In both cases, and in all production sectors, MSs might extend the range of the employment conditions to be applied to posted workers beyond the 'core' matters enumerated in art.3.1, provided such further conditions can be considered as public policy provisions (art. 3.10, first indent).

Therefore, allowing the possibility of MS to broaden the *source* (also non-*erga omnes* agreements), the *scope* (also non-core matters), and the *coverage* (also non-building sectors), the Directive opens up a series of possible voluntary extensions of the default obligations to apply *erga omnes* agreements governing core labour conditions in the building sector. Such a composite set of default/optional coupling, multiplied by 27 MSs, produces a significant level of uncertainties both in sending and receiving perspectives.

From sending perspective, this amounts in greater transaction costs related to the necessity to collect not always ready-available and often fragmented information (Muller 2010). From receiving perspective, particular attention must be devoted to the national systems based on 'voluntarist' or 'autonomous' industrial relations³, which mostly rely on collective bargaining. In these systems, there are no legal instruments to make collective agreements universally applicable. Full autonomy of social partners in regulating labour relations is preserved and collective agreements are legally binding only for employers associations and trade unions which have signed them and their associates. In practice, there is a substantial abstention of the law in regulating collective bargaining procedures and efficacy.

³ 'Voluntarist' industrial relations correspond to the traditional British model of no legislative intervention in the field of collective bargaining and industrial relations, which are left to the free interplay of the social partners and their relative bargaining power. 'Autonomous' industrial relations systems are those typical of the Nordic countries, where the relationships between the two parties of industry were regulated by basic agreements signed at the beginning of the 'industrial era' (1899 in Denmark, 1935 in Norway, 1938 in Sweden, and 1944 in Finland). While this second 'Nordic model' includes substantial institutional support to industrial relations and collective bargaining, it shares with the 'voluntarist model' the absence of legislative instruments to extend the coverage and effectiveness of collective agreements, which is the main issue raised by the implementation of the PWD. This is why these two systems, despite all the differences, can be treated together from this point of view.

Despite the PWD envisages the possibility to refer to non-universally binding agreements too (those "generally applicable to all similar undertakings in the geographical area and in the profession or industry concerned" and those "concluded by the most representative employers' and labour organizations at national level and which are applied throughout national territory"), the further condition that requires "equality of treatment" between foreign firms which post workers and national undertakings (art. 3.8) practically rules out this possibility. In fact, the equal treatment requirement seems to restrict the application of collective agreements only to those which are 'universally binding' since, even if only a national company in the host MS is allowed not to apply that collective agreement, the equal treatment of posting companies cannot be satisfied (*Laval* C-341/05 par. 65-66).

In such industrial relations systems, the 'extension' of the coverage of collective agreements is typically promoted by law by providing preferential treatment in favour of undertakings which apply collective agreements, or establishing such requirement to have access to public economic incentives and to be admitted to public procurement. At the same time, in these systems, the law usually states few limits to industrial action allowing trade unions to put pressure on employers to join or to apply collective agreements. This is particularly the case in Nordic countries.

The ECJ case-law seems to disregard both of these strategies. In *Rüffert*, ECJ has substantially excluded that a public procurement clause imposing the application of a non-erga omnes collective agreement is compatible with the PWD, even if applied by most of firms within a geographic area (in this case, the Niedersachsen Land). According to ECJ, this collective agreement cannot be extended to posted workers because it cannot be considered "generally applicable" insofar as it must be applied only by firms which are awardees of public procurement procedures, and not by awardees of a private tender. In such case, according to the ECJ, the agreement cannot be considered as applicable to the whole geographical area (par. 39-40). In the *Laval* case the second way of securing the general application of collective agreements has not been admitted by the EJC, insofar as industrial action finalised to force a posting company to apply non-universally applicable collective agreements in the host MS alters the substantive balance set by the Directive.

There are further limitations to the role of collective bargaining in defining the terms of employment of posted workers. Even countries with a system for declaring collective agreements to be of universal application can effectively exercise this possibility in industries other than the building sector only if it is explicitly indicated in the law of implementation (EC2003 Communication on the Implementation of the Directive in the MSs; *Rüffert*, par. 27). Moreover, extending the scope beyond the core matters listed in art. 3.1must respect the limit of public policy (Luxembourg C- 313/2006, par. 66).

These ambiguities on the applicability to the posted workers of the collective agreements according to the PWD create room for abuse. On the one hand, some receiving MSs questionably extend the application of collective agreements for protectionist objectives, on

the other hand posting companies try to avoid the application of collective agreements, even when such requirement complies with the PWD provisions.

Minimum rates of pay. Minimum rates of pay are the main element of the employment conditions on which ambiguities can be particularly relevant. As mentioned above, art. 3.1 PWD states that posting undertakings must apply to posted workers, whatever the law applicable to the employment relationship, "minimum rates of pay, including overtime rates" established in the host MS where the work is temporary carried out by law or by universally applicable agreements in the building sector. Host MS may also provide that posting undertakings must apply to posted workers the minimum pay set by universally applicable agreements in other sectors or by non *erga omnes* agreements if they are responding to the requirements of art. 3.8 second indent PWD, above analysed, and their provisions on minimum pay can be deemed satisfying a public policy necessity.

Collectively agreed minimum wages. All the issues on the applicability of collective agreements explained above, generally also refer to minimum rates of pay when collectively agreed. The ambiguities are particularly important for sending firms which may not be able to identify their obligations. In receiving perspective, conflicts may arise around the economic conditions of posted workers, especially when no universally applicable agreements are available, as in the case of 'voluntary' labour regulation systems.

Identification of minimum rates of pay. A further ambiguity can emerge on the actual minimum rates of pay set by law or by collective agreements which have to be paid to posted workers. According to the PWD, art. 3.1 – last sentence, "the concept of minimum rates of pay [...] is defined by the national law and/or practice of the Member State to whose territory the worker is posted".

However, the ECJ jurisprudence previous to the PWD. ECJ has strongly pointed out that the application of the host MS law and collective agreements cannot be justified if it does not attribute additional benefits and rights to posted workers in comparison to those already granted in their MS of origin, but simply entails additional burdens and costs for posting undertakings (*Seco* C-62 and 63/81, par. 9; *Guiot* C-272/94, par. 14 - 15; *Arblade* C-369/96 and C-376/96, par. 50; *Finality*C-49/98, C-50/98, C-52/98 to 54/98, C- 68/98 to 71/98, par. 53). This assessment of 'equivalence' between the minimum pay of the host MS and that one of the MS of origin is made complex by the wide differences in the national notions of minimum wage.

Besides the difficulties in determining the equivalent pay, other ambiguities concern the identification of the elements constituting the minimum rates of pay, as the ECJ has not provided a common notion of minimum wages. However, the ECJ has stated that "allowances and supplements which are not defined as being constituent elements of the minimum wage by the legislation or national practice of the Member State to the territory of which the worker is posted, and which alter the relationship between the service provided by the worker, on the one hand, and the consideration which he receives in return, on the other, cannot, under the provisions of Directive 96/71, be treated as being elements of that kind"

(Commission v. Germany C-341/02, par. 39). "It is entirely normal that, if an employer requires a worker to carry out additional work or to work under particular conditions, compensation must be provided to the worker for that additional service without its being taken into account for the purpose of calculating the minimum wage" (Commission v. Germany C-341/02, par. 40).

Furthermore, in *Commission v. Luxembourg* C- 313/2006, the ECJ has found that it is not possible to impose a provision of the host MS relating to the automatic adjustment of rates of remuneration to the cost of living to posting undertakings. It must be noted that this system of automatic indexation of salaries has been deemed incompatible with PWD only for the fact that it concerns all wages, including those which do not fall within the minimum wage category. According ECJ, "the automatic adjustment of rates of pay other than the minimum wage to the cost of living does not fall within the matters referred to in the first subparagraph of Article 3(1) of Directive 96/71", which limits the possibility of the MSs intervening as regards pay to matters relating to minimum rates of pay (par. 46 - 47). This ruling seems to confirm that the notion of 'minimum rates of pay' in art. 3.1 PWD includes not only the notion of a national 'minimum wage', but also all the scale of different rates of minimum wages for skills, job classification, seniorities known in other national systems.

Finally, the host MS provisions on minimum wage to be applied to posted workers must be sufficiently precise and accessible. In this respect, the ECJ has stated that a foreign firm cannot be obliged to abide with minimum rates of pay in "a national context characterised by a lack of provisions, of any kind, which are sufficiently precise and accessible that they do not render it impossible or excessively difficult in practice for such an undertaking to determine the obligations with which it is required to comply as regards minimum pay" (*Laval C* 341/05, par. 110).

Competition on minimum rates of pay. In this legal context, it is clear that PWD leaves room for legitimate competition on 'labour cost' between national undertakings providing services and posting undertakings providing the same services in the host MS, which cannot technically be defined as social dumping.

Art. 3.1. and art. 3.10 are able to impose conditions of equal treatment only for 'substantially equivalent' minimum pay of rates, so during the temporary stay in host MSs elements of pay other than minimum pay and – at least for the first two years according to Regulation 883/2004 and 987/2008 – social contributions continue to be regulated by rules of MS of origin of posted workers.

In autonomous industrial relations national systems, without a minimum wage set by law and universally applicable collective agreements, it is quite impossible to bind posting firms to observe minimum pay rates generally applied in host MS without adopting the same obligation for national undertakings. Moreover, there are serious limits to obtain this result by threatening or practicing conflictual collective actions (see *Laval C* 341/05, par. 108-111).

It must be noted that PWD and Directive 2008/104/EC on temporary agency work partially reduce the risks of social dumping trough temporary workers use. Art. 3.9 of the PWD allows MSs to provide that user firms must guarantee the same terms and conditions applied to temporary workers employed in the host MS to their temporary workers. Furthermore, art. 5.1. Directive 2008/104 directly states a comprehensive obligation of equal treatment in employment and working conditions in favour of temporary agency workers. This article says: "The basic working and employment conditions of temporary agency workers shall be, for the duration of their assignment at a user undertaking, at least those that would apply if they had been recruited directly by that undertaking to occupy the same job".

Protectionist extension of national legislation: the 'public policy provisions'

According to art. 3.10, the provisions of the host State on matters other than those expressly listed in art. 3.1 can be applied only if they are imperative, since they respond to 'public policy provisions', even though they are not included in one of the categories mentioned above.

This provision is the most evident and pervasive exception to the general application of the law of the State of origin and it represents even the greatest hindrance to the freedom to provide services through posting. Without a common and clear definition of 'public policy provisions' stated by PWD, MSs are induced to utilise this possibility in a protectionist way by deciding discretionarily the categories to which the rule pertains and the kind of interest which deserves protection.

In private law, public policy provisions are those which cannot be derogated by contractual wills of the parties and the decision concerning the imperative nature of national provisions depends on a discretionary power of the MS. In the national private law systems, most MSs generally consider the overall national labour law as responding to mandatory rules. For this reason, many MSs have deemed to be legitimated by art. 3.10 PWD to extend large parts of their national labour law to posted workers.

Conversely, according to Article 3.10, public policy provisions seem to resemble more closely the concept of 'overriding mandatory norms' regulated by art.9 of the Rome I Regulation. Therefore, they must be considered only those norms which cannot be derogated even when foreign legislative provisions should be applicable according to international rules. As a consequence, the power of MSs to qualify a norm as responding to the public policy provision should be justified by fundamental reasons of necessity and proportionality.

The ECJ jurisprudence significantly contributes to clarify the notion of public policy within the PWD. ECJ ascertained that imperative norms deriving from statutory acts or from collective agreements to be applied to posted workers according to art. 3.10 must pass a strict test of necessity and proportionality. This means that the host MS cannot enforce its national provisions on posted workers who are working on its territory if these provisions are not absolutely necessary. In that case, they must be set aside because they represent an excessive burden to the freedom to provide services. The burden of proof of respect of these requirements lies on the host State (case C-346/06, *Rüffert*, par. 40-41). In *Commission vs.*

Luxembourg (case C-319/06, par. 51-54), the ECJ clarified that: "It has to be remembered that the reasons which may be invoked by a Member State in order to justify a derogation from the principle of freedom to provide services must be accompanied by appropriate evidence or by an analysis of the expediency and proportionality of the restrictive measure adopted by that State, and precise evidence enabling its arguments to be substantiated".

Therefore, insofar as the public policy clause constitutes an exception to the exercise of a fundamental freedom guaranteed by the Treaty (the freedom to provide services), it should be interpreted as much restrictively as possible. Thanks to the ECJ's control on the national provisions, the notion of public policy within the PWD is evolving from a purely national concept, to a European one since the national provisions to respond to art. 3.10 requirements should comply with a sort of 'sovereign or supranational concept of Public Policy' (*Commission v. Luxembourg* C 316/06, par. 50-53)

The EC, in Communication 25.7.2003 COM(2003) 458 final, has clearly adopted this interpretation by qualifying the 'public policy provisions' of art.3.10 PWD with the 'overriding mandatory provisions' of art. 9 Rome I Regulation art. 7. The Communication states: "To illustrate the difference between domestic public policy provisions on the one hand and public policy provisions and mandatory provisions (lois de police) in the international context on the other, we can cite the example of the rules concerning dismissal, which in some countries are domestic public order provisions. These are national mandatory rules from which the parties may not derogate by contract, and which are intended to protect a "weak" party (the worker). In these countries, any contract between an employer and employee in which the employee waived his rights to redundancy pay or agreed to shorter than normal periods of notice without compensation would be null and void in regard to national contract law. However, these same rules are not considered to be international public policy provisions or mandatory rules within the meaning of Article 7 of the Rome I Regulation, which would apply whatever the law applicable to the contract. Accordingly, when the employment contract is validly subject to a foreign law, the domestic public policy provisions regarding dismissal do not apply automatically".

In practice, it is difficult to distinguish, the 'domestic' public policy notion and the 'international' one within a national legal system in order to identify the provisions which can be properly extended to the posted workers. Many MSs do operate this distinction neither in general terms nor specifically in the laws of implementation of the PWD which often include a wide list of national labour rules or even the whole labour law as applicable to posted workers.

Undoubtedly, this situation create uncertainty in so far as, in the receiving perspective, MSs are induced to extend the application of their national labour law to posted workers under the justification it is responding to public policy provision thereby resulting in unnecessary protectionist measures. This uncertainty could also represent a basis for social and industrial disputes. From a sending perspective this uncertainty implies additional transaction costs on

posting firms which cannot be ascertained in advance with a sufficient degree of precision of the rules applicable to the posted workers.

Administrative barriers

Article 4 of the PWD provides for the establishment of liaison offices and monitoring institutions by the various MSs "for the purpose of implementing this Directive": these bodies have tasks concerning the gathering and spread of information on terms and conditions of posting (to other MSs' liaison offices and to foreign employers and workers). They also have a monitoring role on possible difficulties in the implementation of the regulation of posting and on abuse and unlawful posting activities.

In carrying out their tasks, liaison offices and monitoring authorities can undertake investigations and obtain information from other sources or bodies (such as social security institutions). These monitoring activities must be carried out in the same way as in domestic cases and in accordance with national legislation. In this context, some MSs have created *ad hoc* bodies, others rely on the pre-existing framework, mainly based on Labour Inspectorates (Pedersini and Pallini 2010).

Nevertheless the ECJ has pointed out that administrative controls and requirements imposed by host MSs to posting firms may significantly add to the costs of firms posting workers, so that they may result in constraints to the transnational provision of services (see the ECJ case *Commission vs. Luxembourg*). Therefore, these measures are admissible only if they are necessary, appropriate and proportionate. However, the ECJ has not precisely defined what are the activities and the kinds of documents which can be required under EU law, since it identified those incompatible with the freedom to provide services, exclusively in the cases taken to its attention.

Admissible administrative requirements. From ECJ case-law it is possible to derive the criteria for determining whether national legislation covering the procedures for the verification of the lawfulness of the intra-Community movement of workers is compatible with Articles 56 and 57 TFEU.

The ECJ ruled that the obligation to appoint a representative of the posting firms in the host MS is not admissible, unless the national authorities demonstrate that otherwise they are not able to effectively perform their control duties (*Arblade*C-369/96, par. 61 - 64).

Similarly, ECJ maintains that any specific work visa regime, including for non-EU nationals, as well as the obligation to obtain an authorisation before posting workers are contrary to the freedom to provide services. Also the requirement that the posted worker must have been employed by the posting firm for a minimum number of months before posting has been deemed disproportionate as a way to enforce the PWD (*Commission vs Luxembourg, C-445/2003*, par. 32; *Commission vs Germany* C-244/04, par. 55-60; *Commission vs Austria C 168/2004*, par. 27 - 28).

On the contrary, the submission of a prior declaration including various pieces of information on the posted workers, their tasks, the location and duration of their work, by the service provider, was deemed as proportionate. The required declaration could also mention that posted workers from third countries are in a lawful situation (with regard to the visa requirements) and legally employed in the country where the service provider is established (*Commission vs Germany* C-244/04, par. 44; *Commission vs Luxembourg*, C-445/2003, par. 31).

More recently, in the case *Palhota* C-515/08(parr.33-35), the ECJ has considered the declaration of posting required at that time by Belgium as incompatible with EU law, as far as the commencement of the posting was dependent on the notification of the registration number of the declaration to the employer within five working days. Now, since this requirement was excluded, the current LIMOSA declaration seems to stand the test of the ECJ. The existing mandatory LIMOSA-declaration includes information on the identity of the employee, the employer, and the Belgian client or principal, the starting and termination dates, the type of service or the economic sector, the location of the activities, the weekly working hours and the time schedule of the employee (see Annex C on LIMOSA).

Besides the usual inspection of undertakings or workplaces, some MSs have relied on a further method to support compliance with the transposition rules: the keeping of records required for monitoring purposes at the place where the services are provided. The ECJ has deemed the provision of German Law compatible with art. 56 TFEU (art. 49 TCE). It imposes an obligation to retain only absolutely necessary documents (the employment contract, pay slips, time-sheets and proof of payment of wages) translated in the German language, only for the duration of the posted workers' time in Germany and of the building project, in order to make practically possible to carry out the inspection on site. The ECJ has considered this obligation proportionate, given that it does not involve a heavy financial or administrative burden for the employer posting workers in Germany. The ECJ has found that "The organised system of cooperation and exchange of information between national administrations provided for in Article 4 of Directive 96/71 does not render superfluous the obligation to translate, which is imposed on employers established outside Germany. It is clear from the file before the Court that the documents required from employers by the AEntG are not retained by those administrations, which therefore are not able to send them, with a translation, within a reasonable period to the competent authorities of other Member States" (Commission vs GermanyC-490/04, par. 75 - 78).

Conversely, the ECJ underlined that the differences of form or content between the documents required in the host and sending MSs do not justify keeping two distinct sets of documents if the information provided by the documents required under the rules of the receiving MS is 'adequate as a whole' to enable the controls in the host MS.

Obligations to inform posting firms. Among the duties of liaison offices and authorities, there is the obligation to provide information on the terms and conditions of employment

generally applicable to posted workers. According to the ECJ case-law, this is a necessary condition to make host MS provisions binding for posting undertakings.

According to the Communication by the Commission on the implementation of the PWD and case-law, this activity is often carried out informally. Set aside the fact that the service must be provided free of any charge (coherently with the wording of the directive relating to mutual administrative assistance), no specific information is given on the way to effectively make the information available nor on the modalities to reply to the specific requests. Generally, information is made available via websites. The majority of these sites are in English, with some notable exceptions presenting multi-lingual layouts (in France and Sweden). Various MSs have no website, while others provide the complete information only in the native language. Finally, some of them present the information in an indirect and unclear way. Various differences also refer to the layout of the website, which can be organized in a legalistic way, presenting official documents or, quite schematically, through FAQs illustrating quick solutions to possible problems and questions (Muller 2010).

Unjustified administrative requirements and the lack of clear and easy accessible information on the terms and conditions to be guaranteed in host MSs create serious obstacles to the free movement of services.

Monitoring and enforcement

Monitoring and enforcement of the PWD are difficult for a number of reasons, including the short duration of posting (see the LIMOSA case in Annex C and Ecorys 2011), the problems in the transnational enforcement of sanctions, and language barriers. In addition, the limited awareness about the phenomenon and the general lack of dedicated monitoring structures, together with the need to exchange data and information across national administrations are practical obstacles to the effectiveness of inspections.

According to the case studies, the enforcement of the PWD represents a common concern of stakeholders at national level. Labour inspectors explicitly refer to widespread difficulties in checking the actual establishment of firms in foreign MSs, to qualify the grounds of posting in terms of the foreign habitual place of work and residence, and to verify terms of employment of posted workers, due to language problems, difficulties with foreign documents, lack of a supervisor of posted-workers on site, lack of information on conditions applicable in the sending MS, and slow cooperation by corresponding authorities in the sending MSs. Scarcity of staff, training and specialisation of inspection services on posting have been reported in Denmark, France, and Germany (see case studies in Annex E).

Trade unions, and often employers, stress the importance of strengthening the enforcement of rules on posting and demand stricter checks and controls. Such requests in many cases have to consider the lack of resources of inspection services, so that only a few controls can be made, even when, like in Germany, existing rules would require much broader and deeper monitoring of posting.

Information exchange. According to article 4.2 of the PWD, the national authorities should mutually cooperate to provide to each other information "on the transnational hiring-out of workers", including possible abuse, and cooperate alongside the Commission in order to examine potential difficulties in the application of art. 3.10 (public policy provisions). In order to promote cooperation, each MS has to notify the other competent bodies and the Commission. The various informative activities must be carried out free of charge.

The importance of cooperation as a fundamental tool for implementing the PWD was already recognized by the ECJ in *Arblade*, since local administrative requirements and controls were deemed as compatible with the PWD because an organised system for cooperation and exchanges of information between MSs as provided for in Article 4 of PWD was lacking (*Arblade* C-369/96, par. 78-79).

However, cooperation between MSs cannot be limited to the exchange of documents, but must also include actions aimed at verifying the lawfulness of employment relationships in sending MSs, by checking for instance the existence of a genuine link between employer and employee, or the self-employment status.

Europe-wide administrative cooperation seems to be still rather underdeveloped, despite its crucial role in fighting distortions and abuse. A number of steps taken by the Commission have helped to improve the level of cooperation and the experience in bilateral cooperation and agreements in growing (France, for instance concluded bilateral agreements with Germany, Belgium, Bulgaria, the Netherlands, and Spain). However, more precise targets and procedures may be useful to enhance enforcement and notably reduce the time to complete exchanges of data and information.

Monitoring and sanctions. Complementary to art. 4 is art. 5, stating that "Member States shall take appropriate measures in the event of failure to comply with the PWD". In particular, adequate procedures are to be made available to workers and/or their representatives for the enforcement of obligations under the PWD. As a consequence, posted workers and/or organisations representing them should have the possibility to file complaints to the relevant authority of the host MS to ask for enforcement.

Monitoring authorities must have the necessary resources and powers to follow up on such complaints, but any specific tool introduced to this aim must be assessed in terms of proportionality and non-discrimination between national and foreign undertakings (see the LIMOSA and RUT-Register cases in Annex C).

Some MSs have introduced no special sanctions to ensure compliance with the PWD and the mechanisms in place are, therefore, those covering domestic posting and hiring-out (Finland, France, Italy, Portugal, the UK and Sweden). Other MSs, instead, have introduced specific penalties (Denmark, Spain, Greece, Luxembourg, Germany, Austria, and Ireland). The case of Luxembourg deserves particular attention because it includes an 'early warning' system which issues a compliance order rather than an economic sanction. Therefore it appears particularly respectful of the proportionality principle.

Also severe sanctions against posting companies unfulfilling PWD are far from being actually dissuasive. Not only it is difficult to discover a PWD violation in practice, but even when a sanction is imposed its effective enforcement is difficult. In fact the sanctioned posting company stays in the territory of the host MS imposing the sanction only for short time and it does not have goods, stable representatives and sites on the territory of the host MS.

A possible solution which is practised by some MSs is to impose a joint liability for PWD violations on utilising firms. ECJ stated that it is was admissible for a MS to set up a system providing for joint and several liability for general or principal contractors in the light of art. 56 TFEU (art.49 TEC), which has to be adjudicated by national courts and must be proportionate.

According to Case C-6o/o3, Wolff & Muller (par. 45), "article 5 of Directive 96/71/EC of the European Parliament and of the Council of 16 December 1996 concerning the posting of workers in the framework of the provision of services, interpreted in the light of Article 49 EC, does not preclude [...] a national system whereby, when subcontracting the conduct of building work to another undertaking, a building contractor becomes liable, in the same way as a guarantor who has waived benefit of execution, for the obligation [...] to pay the minimum wage [...] (or) contributions to a joint scheme for parties to a collective agreement". This seems to be an effective way to promote compliance but also awareness, especially by employers, of the employment and working conditions of posting.

Enforcement is a key priority for social partners and public authorities, as illustrated by the case studies. On one hand, the social partners often point to the importance of investing in enforcement and developing new and more effective instruments and, on the other hand, the labour inspectorates highlight the problems connected to the cross-border application of sanctions. Also attributing a role to the trade unions in monitoring compliance with the rules on posting is considered a possible and useful solution. This is especially true in the autonomous labour relations systems, such as Denmark, where the main actors in the regulation of the employment relationship are trade unions and employer associations. But also in countries like France, where the role of the political actors is traditionally prevalent, the inclusion of trade unions in the enforcement system is considered useful (see Annex E).

Dispute resolution. Article 6, states that judicial proceedings may be initiated by the posted worker in the MS in whose territory the worker is or was posted.

In situations of cross border conflicts, Regulation 44/01 (Brussels I), provides for a set of different *fora*. According to Brussels I, if a worker wants to sue his employer, he can do this either in the court of the MS where the employer is established ('domiciled'), or where the employee habitually carries out his work, or, if there is no habitual place of work, where the business that hired the worker is situated. In other words, also the European rules on jurisdiction, like rules on choice of law in Rome I Regulation, often lead in effect to a 'country of origin' approach.

On the other hand, the PWD provides an alternative *forum*. This is clearly established in art. 6 of the PWD, which reads as follows: "judicial proceedings may be instituted in the Member State in whose territory the worker is or was posted, without prejudice, where applicable, to the right, under existing international conventions on jurisdiction, to institute proceedings in another State". This means that the court of the host State is an alternative and concurring *forum*, which can be used in order to enforce the rights guaranteed by the PWD. However, it has been noted that workers do not often use the jurisdiction clause in the PWD.

As it has been stressed in the comparative study on the legal aspects of the posting of workers in the framework of the provision of services in the EU "in all the receiving Member States it seems that the right to take legal action has at present hardly been or has even never been used by posted workers nor by their representatives. This must be interpreted as a clear signal that the jurisdiction clause in the PWD on its own is not enough to provide an effective remedy" (van Hoek and Houwerzijl Report 2011, p. 35).

In the rare cases of legal action, posted workers tend to stand up for their rights before the courts of the sending MS than before those of host MS. Thus most disputes of transnational posting will be dealt with rules different from those of the host MS. In this situation, the 'public policy provisions' introduced by the host MS could be hardly appreciated by courts in sending MS. In fact, due to the differences in labour conceptions in MSs, some rules, which are considered as mandatory in the host State, may probably be disregarded by a court established in another MS, because it merely applies the Law of the State of origin, as provided for in art.8 of Rome I Regulation. In case the worker chooses to bring an action in one of the alternative *fora* established in the Brussels I Regulation, great uncertainty on the application of these rules is easily foreseeable.

While art. 5 provides that MSs must ensure the availability of adequate procedures to workers and/or their representatives for the enforcement of PWD obligations, art. 6 does not explicitly include the right to file judicial proceedings in favour of worker representatives. This finally amounts to a significant dilution of the capacity of judicial proceedings to enforce the PWD.

In sum, the difficulties illustrated above in monitoring, the problems in sanctioning abuse and the limited effectiveness of judicial proceedings significantly hamper the enforceability of the PWD.

1.2.2 ECONOMIC ISSUES

Integration and development of the single market of services

Although the service sector makes up a significant share of the European economy and services are the most important source of job creation, the effective implementation of the single market of services still remains to be completed. In order to achieve this objective, the transnational provision of services through the posting of workers should not be hindered by unnecessary regulatory obstacles and should instead be sustained by a clear and consensual regulation.

The regulatory uncertainty which has arisen over the posting of workers in the last fifteen years produced transaction costs and opened scope for conflicts and unfair competition which may have actually reduced the PWD's potential to foster the transnational provision of services.

Case studies highlight that outwards of domestic workers posted in other countries represent an opportunity for businesses and a sign of the dynamism and strengths of the domestic economy. Furthermore, intra-group posting in well-established multinational firms, especially in high-wage sectors, emerges as a definitely accepted and well-established organisational aspect of the transnational operation of companies and market integration.

Conversely, the issue of unfair competition associated to lower labour costs allowed by the utilisation of inward posted workers prominently emerges from the case studies. In particular, the two types of posting which are typically at centre of the economic debate are those linked to the provision of services through a contract with a user companies (which may entail intra-group posting when the service provider has a local branch in the receiving country) and temporary agency transnational posting (See Annex E).

Employment and labour market

Posting has employment and labour market implications. In particular, it offers job opportunities in sending countries as well as it represents both a solution for skill and labour shortages in the receiving countries and a means to foster a more efficient allocation of labour across boundaries. However, it is debated whether it can have 'displacement' effects in the receiving labour markets, whereby indigenous workers are substituted by posted ones. At the same time, it should be underlined that, since employment creation in the EU relies heavily on the development of the market of services, posting may effectively contribute to support job creation.

The issue of 'social dumping' linked to inferior employment and working conditions of posted workers prominently emerges from the case studies. In each case there is at least some reference to lower pay rates, longer working hours, poor working conditions – also in terms of health and safety –, poor living conditions – especially with reference to housing –, disproportionate deductions for accommodation and other forms of exploitation. Such reference is usually presented by trade unions in interviews and in union documents on specific situations, but it is also mentioned by labour inspectors and is sometimes identified in studies and official enquiries/documents. Social dumping is seen as producing job displacement, on one side, and unfair competition between local and posting-user firms, on the other side. The recent economic downturn, with the connected increase in unemployment and the possible reduction in the importance of skill and labour shortages, contributed to exacerbate tensions around such issues.

The concept of job displacement has a very vivid and direct representation in the case studies, so that we can see, for instance, that in tendering procedures in the civil engineering and construction sector foreign subcontractors tend to be awarded contracts while domestic firms have great difficulties in copying with that competition – something which is in fact reported for France, Germany and UK (See Annex E). This effect is similar to off-shoring, when a company closes down in a country to open/move production abroad. It must be underlined, however, that, in a dynamic perspective, the assessment of the impact on employment is much more difficult, because sectoral shifts and potential efficiency gains linked to posting can in fact lead to job creation which may (at least partly) offset the 'static' loss. Of course, possible dynamic gains leave open the question on how to support the workers who do not get or lose a job with a view to find another one.

1.2.3 SOCIAL ISSUES

Protection of worker rights

As showed above, the PWD surely increased the formal protection of posted workers by providing a nucleus of basic protections based on the provision of the host MS which can integrate, whenever relevant, those grounded in the 'country of origin' principle of the Rome I Regulation. However, the ambiguities in the definition and the regulation of posting as well as the weaknesses in the enforcement of the PWD can result in distortions and abuse in the posting of workers.

The literature underlines the difficulties in guaranteeing the enforcement of the present regulatory framework on the posting of workers as regards pay levels, compliance with social contribution obligations, and respect of health and safety regulations. Employment and working conditions are allegedly often below the minimum standards that should be granted according to the national legislations implementing the PWD.

The case studies illustrate a number of situations where the working conditions of posted workers appear as violations of the regulatory framework. One of the irregularities indicated in the case studies is the extension of the weekly working hours, even beyond the legal maximum, without compensation, so that hourly wages are pushed down compared to their nominal level. Harder working conditions can be reflected in higher accident rates.

In this case, only anecdotal references can be made to single high-profile cases. A relevant example is provided by the Bouygues Travaux Publics in the construction of a nuclear site in Flamanville (see Annex E) concerning some Polish workers posted from a Cypriot subsidiary of an Irish temporary work agency specialised in construction engineering and related trades. The workers were found to have wages around half of those of French workers. The company was also accused of covering 38 undeclared accidents out of the 112 declared accident. The same case was echoed in the public debate in the UK, where the unions were worried that the same subcontractors could be used in the construction of another nuclear site. Indeed, the presence of large contractors and sub-contractors in the engineering sector with EU-wide operations can facilitate the emergence of common practices violating workers' rights. At the same time, this also points to the possibility of building a transnational system of monitoring and enforcement and, in positive, it could help the diffusion of good practices. In this respect,

it interesting to note that the issues around posting do not only refer to SMEs coming from low labour cost countries, but also involve large MNCs based in high labour cost countries.

Case studies report other abuse undermining the workers' rights. For instance, bogus selfemployment represents a challenge to enforce the PWD and effectively protect workers. Besides the construction sector, where bogus self employment is apparently frequent and a more effective enforcement should be strongly ensured, the German case study shows that another sector where problems of enforcement are emerging is the meat processing industry.

Other cases of abuse are reported in the road haulage sector, (see in Annex E the French case of agencies posting Turkish drivers to France for several months or domestic firms setting up companies in Poland to provide "low cost" drivers for French operations). Also the very high level of posting from Luxembourg, for instance to Belgium and France, has been linked to the search of lower social security costs.

These problems of enforcement brings into question the effectiveness of national labour inspection systems, but also of adequate information available to posted workers about the conditions they are entitled to and their actual possibility to act. Posted workers often lack crucial information about their rights and there are only limited opportunities to receive support from institutional actors. Trade unions often point out these illicit situations and usually offer assistance to posted workers to start individual disputes against employers.

Finally, the possibility to provide transnational services represents an opportunity for business expansion across Europe, especially in sectors such as construction where low-labour cost countries tend to hold a comparative advantage over high-labour cost countries and business growth linked to internationalisation may be uneven and concentrated in the former. However this business opportunity is sometimes exploited by establishing firms with the sole objective to post workers abroad. As long as these firms do not have any genuine local employees and merely recruit workers to be posted abroad – sometimes even migrants already present in the country of destination – they may be regarded as circumventing national labour regulations. These practices of social dumping exploit the difficulties in detecting illicit behaviours and enforcing PWD result in a systematic erosion on the rights of the posted workers. For local workers, abuse and distortions of posting resulting in social dumping can lead to a worsening of the general work environment and increased pressures on employment and working conditions, similarly to other illicit situations, such as undeclared work.

Industrial relations

Trade unions have often focused their attention on the differential treatment of posted workers and this has sometimes led to attempts to cover posted workers by collective bargaining – and at times to criticism for the use of posted workers *per se*, as a practice which undercuts employment and working conditions and replaces 'good' domestic jobs with 'substandard' foreign jobs.

As explained above, the ambiguities in the definition of the applicability of collective agreements to posted workers, especially in the case of voluntarist and autonomous systems, can lead to conflicts concerning the representation and protection of posted workers.

However, it should be underlined that differences in the terms of employment of local and posted workers have to be regarded as implicit in the regulation of the posting of workers, since the PWD only refers to the applicability of a mandatory nucleus of minimum protection measures. The identification of this core of basic protections established by the PWD is an improvement on the standard law applicable to the employment contract set by the Rome I Regulation, since, in any case, the more favourable conditions ensured by the regulations of the country where the employee habitually works are preserved.

Moreover, the attempts by trade unions to guarantee exactly the same conditions for local and posted workers contrast with the fact that differentials in employment and working conditions can represent a legitimate source of competition between national and posting undertakings. They are a critical source of competitiveness for firms and introduce important market pressures able to improve allocative and productive efficiency.

Indeed, an eventual equalisation of treatment may result in a relative closure of local markets with the protection of domestic workers and firms. Therefore, in addition to the limitations to market integration, the attempts by trade unions to 'include' posted workers in the domestic collective regulatory system may in fact 'exclude' them from the job opportunities created by the transnational provision of services.

Should the present arrangement appear unsatisfactory, it is clear that the solution of this problem requires a careful balance between economic integration and social cohesion.

Indeed, according to the case studies, posting is usually connected to the weakening of industrial relations by introducing competition based on terms of employment, so that the positions of employers is reinforced, and by representing an area which tends to be union-free within the national regulatory space. In particular, such challenges are especially felt by the trade unions when the enforcement of collective bargaining is not supported by legislation which makes deals generally binding, so that the minimum pay rates guaranteed by the PWD are missing (like in the case of Denmark) or significantly lower than collectively agreed rates (as in the UK).

However, it must be noted that industrial relations play in all national cases a prominent role in detecting and contrasting abuse in the field of posting, through their day-to-day presence in workplaces. This role is particularly evident in the autonomous or voluntarist industrial relations systems (Denmark and UK), since in that case the regulatory capacity of industrial relations greatly depend on the mobilisation of trade unions. Here, it is important to draw the attention on how collective bargaining in the engineering and construction sectors in Denmark and UK has explicitly taken on the issue of posting by introducing rules aimed to support the enforcement of collective agreement to subcontractors and posted workers (Annex E).

1.3 BASELINE SCENARIO

1.3.1 NATURE AND EXTENT OF THE POSTING OF WORKERS IN EUROPE

The main statistical source of information on the nature and extent of posting is represented by the E101 certificates. These administrative forms are not directly linked to the implementation of the PWD since they are used to guarantee the social security coordination between MSs. Actually, the number of posted workers and workers who apply for the E101 do not overlap completely and it is still uncertain to what extent the number of E101 certificates can be a precise measure of the number of posted workers⁴. Even with these limitations, the E101 data collection of the EC (EC 2009 and EC 2011) fills an important information gap concerning the extent and the distribution of the phenomenon across Europe. Data on E101 certificates by country (sending and receiving) are available from 2005 to 2009. However, it must be underlined, that data can be considered as fully reliable starting from 2007, because for years 2005-2006 data are missing for many countries (EC 2009 and EC 2011).

At national level, additional sources of data exist in a very limited number of countries. These sources respond to different aims and contain data which are not directly comparable. In fact, national databases have variable coverage and include heterogeneous information. These are, for instance, the records maintained by SOKA Bau in Germany for the Leave and Wage Equalisation Fund in the construction sector, the pre-declarations of posting collected by the French Labour Inspectorate, the notifications of the LIMOSA system in Belgium and of the RUT-Register in Denmark. Comparison of national data with the number of data on E101 certificates shows significant variability. In the case of Denmark and France, the postings declared through national monitoring systems are systematically lower than E101 certificates. This can be due to the start-up phase in Denmark and to a narrower definition of the cases which must be declared in France. In Belgium, LIMOSA data are remarkably higher than E101 (almost double). This can be linked to differences in coverage, but also to a higher effectiveness and comprehensiveness of LIMOSA, which is a centralised mandatory system, reinforced by sanctions in case of non-compliance.

In conclusion, despite their limitations, data on E101 certificates remain the only source of comparable data on posting across Europe.

Extent of posting in Europe

Table A1, in Annex, shows the number of postings sent from every EU-27 or EFTA country to another EU-27 or EFTA country. In the same way, the table shows the number of postings received by each country of the EU-27 or EFTA from another EU-27 or EFTA country.

The posting of workers involves a small part of the active population in Europe (on average about 0.4%). Data shows that posting represents, on average, 0.75% of the employment in

⁴ The number of postings is not equal to the number of posted persons (the same person can be posted several times). Furthermore, the E101 social security form is not issued to all posted workers (either because not required – postings of over 12 months are not considered posting for social security purposes – or because some companies do not apply for E101 forms when workers are posted, especially in the cases of very short-term postings).

industry and services. However, between 860 thousand (in 2005) and 1.01 million (in 2009) of E101 certificates related to postings were registered. This means that postings play a role in labour mobility⁵.

Posting, from 2005 to 2009, is strongly correlated with the economic cycle since it regularly increased until 2007, while a decrease and then a stagnation in the total number of postings is observable during the economic recession in 2008-2009 (see Figure 1.1). This evidence is significant and confirms previous results of Idea Consult (2011). For a given socio-economic and institutional context, posting of workers, as a means to provide services at transnational level, mainly follows the economic cycle and it increases during economic expansion and slows down during recession.

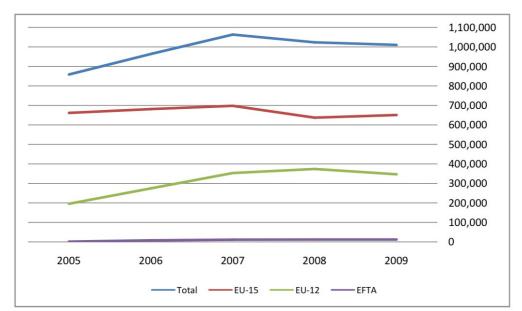


Figure 1.1. Postings sent from E-15, EU-12, EFTA, and total in the period 2005-2009

Flows of postings

MSs send and receive posted workers. Figure 1.2 shows the postings sent from and received by each country in the period 2007-2009. Although flows are both from and to each country, many countries are either net receiving countries or net sending countries. Focusing on the 2007-2009 data (which are better comparable), it clearly emerges that, in general, EU-12 MSs are net senders, with the exception of the islands (Malta and Cyprus, for which labour supply shortages in the local market may be a strong driver for utilising posted workers⁶). EU-15 are usually net receivers, with the exception of France, Portugal and Luxembourg. Portugal (in 2009) and France (in 2008) together with Poland, which is the most significant sending country in the 2007-2009 period, sent the highest net number of postings. Also Germany, Luxembourg, and Belgium must be included among the countries that sent a

⁵ According to Idea Consult and Ecorys, (2011), in 2007 postings represented 18.5% of non-nationals EU-27 citizens in the labour force. This percentage provides only a rough indication of the weight of postings on non-nationals EU-27 citizens in the labour force. On the one hand, a E101 certificate does not represent a full-time one-year equivalent worker, on the other, the Labour force survey which provides the data on non-nationals EU-27 citizens in the labour force does not cover posted workers.

⁶ According to Idea Consult and Ecorys, (2011), labour supply shortage in local market is one of the main drivers of posting.

significant number posting. In 2008 and 2009 the Netherlands⁷, Germany, and Belgium received the highest number of postings in net terms. France and Spain are also among significant receiving countries.

In order to have an idea of the national relevance of the phenomenon it is necessary to look at sent and received postings as a percentage of the people employed in the private sectors (industry and services). The average ratios of sent postings and employees in the private sector and of received postings and employees in the private sector indicate a certain variability of the phenomenon at national level (Annex A, Table A6).

Excluding Luxembourg which is an outlier for obvious geographical reasons, in general, postings represent a very small part of the employment in the private sector. However, for some countries such as Poland, Slovakia and Slovenia, Estonia, Portugal, France and Hungary as sending countries and Belgium, the Netherland and Malta as receiving countries, the phenomenon has a certain relevance in terms of employment. Moreover, the importance of the phenomenon increases since posting tends to be concentrated in some sectors (see Table A5 in Annex A) or regions (see the case studies in Annex E).

Country by country data (2007-2009) on posting flows are provided in Annex A (Table A2-A4) and show a pattern of flows between sending and receiving countries which largely follows geographical proximity. This evidence can be related to the presence of strong economic links across neighbouring countries. In addition, as observed by Idea Consult and Ecorys (2011), since cultural and language differences represent an obstacle to the posting of worker, flows between neighbours which are usually culturally closer are more frequent. Table 1.1 summarizes the directions of flows of postings in 2009.

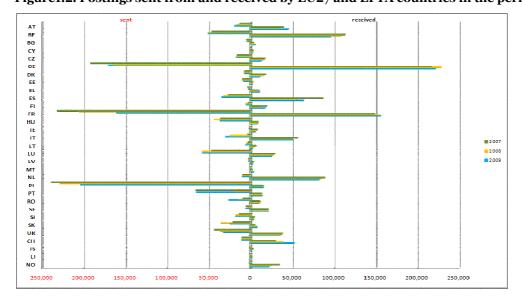


Figure 1.2. Postings sent from and received by EU27 and EFTA countries in the period 2007-2009

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⁷ From sending perspective, in 2007-2009, the Netherlands reported an extraordinarily high number of E101 certificates for persons active in two or more MSs which cannot be classified in any destination country. This reinforces the idea that the Netherlands is mainly a receiving country.

Table 1.1. Evidence on the direction of flows of postings (based on 2009 data)

From	То			
France	Belgium, Germany, Italy, Spain, UK, Switzerland			
Poland, Czech Republic, Hungary, Slovakia, Slovenia and	Germany, France Belgium, the Netherlands, Austria and			
Portugal	Spain			
Germany	Austria, the Netherlands, France, Belgium and			
Belgium	France and, the Netherlands			
Luxembourg	France and, Belgium			
Estonia	Finland			
Latvia and Lithuania	Norway, Germany and Sweden			
the Netherlands	Belgium, Germany			
UK	France, the Netherlands, Spain			

Sectoral - regional breakdown

From previous studies (Idea Consult and Ecorys 2011, and others) it also emerges that posting is concentrated in some sectors and regions. However, the lack of data makes a regional analysis very difficult. Sector analysis can be performed only for a sub-sample of countries while sub-sectoral data are largely missing. The available evidence shows that the construction and the service sector (financial intermediation, business and transports) are the most relevant posting sectors. In particular, the analyses carried out by the EC (2011) reveal that in 2009 around 55% of E101 were issued for the industry sector (of which around half for the construction sector)⁸, while E101 certificates issued for activities in the service sector represents around 44% of the total (see Table A5).

The lack of systematic information on the specific features of posting (skills, duration, education, gender, age, etc.) does not allow more accurate analyses of the phenomenon. Some information on duration and age has been collected by Idea Consult and Ecorys (2011) and shows that usually posting is used for short-term projects. Generally, comparable information about wages, working conditions and social features of posted workers are insufficient or not available.

1.3.2 THE MAIN DRIVERS OF POSTING

Given the relatively small number of workers involved in posting, the drivers of the phenomenon and its overall social and economic influence may not be directly captured by aggregate macroeconomic indicators at EU-level. Even at national level, although not negligible in some sectors and geographic regions, the effects of posting are not reflected from national data. However, the data breakdown at national level and their analysis provide some interesting evidence which allows understanding which are the most relevant drivers of posting.

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⁸ As explained above, data on posting at sectoral level are available only for a sub-sample of countries. For this reason the relative weight of industry as sector of destination for posting can be biased. In particular, the overall level 55% may be an underestimation since it includes, for instance, the sectoral data of UK, which sends workers only to the service sector (see EC 2011).

In particular, starting from the potential drivers of posting⁹, some variables have been selected as proxies of such drivers:

- GDP per capita, as a proxy of wealth and 'business development' of a country;
- Labour productivity, as a driver which may attract postings to efficiently allocate labour force;
- Unemployment rate. On the one hand, workers of countries with high unemployment rates can find job opportunities through posting, both because some workers can be recruited only for being posted abroad and since posting represents a chance for business expansion, which involve new job creation. In addition, in countries with very low unemployment rates workers could not be willing to be posted abroad. On the other hand, in a receiving perspective, countries with low unemployment rates have tight labour markets and labour shortages can be a significant driver of posting;
- Labour cost, since one of the possible drivers of posting is reducing labour costs with potential advantages in terms of competitiveness for the utilising firms and sectors and potential distributive gains for employees;
- The OECD employment protection index, to capture the main institutional differences in national labour markets which can favour or hinder the use of posting;
- Trade union membership as a proxy of the extent of the role of trade unions in influencing industrial relations and working and employment conditions. Therefore, trade union membership may favour of hinder the use of posting;
- The level of transnational integration of services, as a proxy of the level of economic openness and integration, especially in terms of transnational trade in services. On the one hand, posting can favour market integration as a means of the transnational provision of services. On the other hand, a high level of market integration should favour flows of posting as a physiological aspect intrinsically related to the international trade in services. In fact, the possibility of market entry or extension of the service provision abroad can be an important driver for posting;
- The geographical proximity between countries. Posting can be related to the presence of strong economic links across neighbouring countries. Country by country differentials in economic and social variables (and cultural and language proximity) may explain why the flows of posting specifically occur between certain countries.
- Finally, another relevant possible driver of posting is the skill/specialisations shortage. Although the econometric analysis does not explicitly include any direct proxy of this driver due to data limitation at country level, this potential driver is carefully taken into account in the overall analysis through deductive reasoning considering the evidence emerging from the case studies.

...

⁹The present selection of the relevant drivers of posting is supported by both the empirical evidence and the previous studies such as Idea Consult and Ecorys (2011).

Table 1.2 shows a brief overview of the main economic and social indicators considered in the analysis. It must be underlined that in most cases variables are both auto-correlated and generally correlated to the GDP (Table A7). Details of the empirical analyses are provided in Annex A.

Table 1.2. Socio-economic indicators

Country	GDP per capita Average 07- 09 EU 27=100	Labour productivity Average 07- 09 EU 27=100	Unemployment rate Average 07-09	Labour cost index year 2008 EU27=100	Trade union membership 2008 EU 27=100	ЕРІ	Mkt integration Average 07- 09
AT	135.5	104	4.3	125	120	2.41	0.43
BE	129.4	122	7.5	161	274	2.61	0.49
BG	18.1	10	6.4	12	56	:	0.44
CY	86.1	53	4.3	70	211	:	0.79
CZ	53.9	24	5.5	43	73	:	0.36
DE	121.2	115	8.0	134	83	2.32	0.19
DK	169.4	123	4.4	165	252	2.63	0.47
EE	46.4	24	8.0	37	31	2.39	0.59
EL	84.6	54	8.5	75	67	2.97	0.22
ES	95.6	70	12.5	86	50	3.11	0.24
FI	137.3	112	7.2	126	345	2.29	0.30
FR	121.1	118	8.6	147	46	3.00	0.12
HU	40.7	23	8.4	36	79	2.11	0.46
IE	162.7	113	7.6	125	118	1.39	1.13
IT	105.3	81	6.9	114	196	2.58	0.14
LT	35.4	22	7.9	27	31	:	0.27
LU	321.0	161	4.7	142	281	3.39	2.17
LV	37.7	19	10.2	27	53	:	0.26
MT	57.1	47	6.4	51	207	:	1.25
NL	143.9	117	3.5	134	87	2.23	0.36
PL	35.1	23	8.3	35	44	2.41	0.23
PT	65.4	40	8.5	53	64	2.84	0.28
RO	24.2	11	6.4	19	89	:	0.25
SE	141.9	130	6.9	155	283	2.06	0.35
SI	71.8	52	5.1	61	147	2.76	0.36
SK	45.9	26	10.9	35	61	2.13	0.37
UK	120.5	113	6.2	99	99	1.09	0.17

SOURCE: Eurostat, EIRO and OECD, elaborated by Ismeri Europa

Labour cost index is calculated from the hourly labour cost in industry and services as collected in the 2008 Labour Cost Survey of Eurostat, EU-27=100.

Trade union membership is calculated as the number of members of trade unions on employment, EU-27=100.

Mkt integration is calculated as credit + debit in balance of payments (services)/on value added in services.

Although these statistical and econometric analyses fill relevant information gaps concerning the drivers of posting and how they affect the extent and the destination of posting, two analytical limitations must be recognised. First lack of data prevents a more detailed analysis at sector level where probably effects, relations and dynamics between variables are more significant, clearer and unambiguous than at aggregate level. Second, a problem of specification surely emerges in the multivariate analyses since posting is determined by its drivers and, at the same time, influences the drivers themselves. For these reasons, empirical results have been integrated by the case studies.

Finally, the econometric study combined with the national case studies carried out for this report provide some relevant insights on the drivers of posting summarised below. This emerging evidence helps clarify and substantiate the problems and issues illustrated in Section 1.2.

GDP, unemployment and labour costs

According to the econometric analysis, the unemployment rate - from a sending perspective - and labour costs - in a receiving perspective- are the main explanatory variables of the extent of posting. Since labour costs and unemployment rates are strongly correlated to the GDP, variations in GDP allow predicting the trend in postings in both sending and receiving perspectives. In general, posting follows the economic cycle.

Labour costs and labour/skill shortages

According to the country-by-country analyses, the role of the labour cost as a driver of posting is strongly confirmed. The relevance of labour costs implies that skill and specialisation shortages are the main factor which can explain posting from countries/sectors where labour cost is relatively high. The main results of the statistical and empirical analyses reinforce the idea that there are two main types of posting. Low-medium skilled workers are posted from low labour cost to high labour cost countries, in labour-intensive sectors, whereas medium-high skilled workers are posted in qualified occupations.

According to the case studies, labour cost differentials emerge as a basic component of the phenomenon of posting. Besides being identified as one of the main drivers of posting in general, labour cost is relevant in connection with other drivers. This is an important consideration which not only emerges from the aggregate analysis, but it is also stressed in the cases studies. All drivers influence posting of all countries at the same time, in both receiving and sending perspectives, and they imply the level and structure of postings in combination. So, even if the main driver of inward posting in certain situations is skill shortage, nevertheless labour cost – in connection with other drivers such as geographical proximity (see below) – contributes to define and select the origin of this posting. For instance, even the high skilled German posted workers tend to move towards countries with relatively higher labour costs, so that the benefits of filling skill (or labour) shortages combine with cost-related advantages for utilising firms linked to labour costs.

In the case studies, there are indications on the wage differentials between indigenous and posted workers. Of course, it is difficult to compare the situations of workers, so that pay differences may reflect distinct characteristics of the workers involved. However, the pay gaps are usually quite high, so that even by taking into consideration the possible different situations in terms of skills and productivity, wages of posted workers would remain lower. In Denmark, a study on the construction sector indicated that, in the mid-2000s, workers from Eastern European countries had on average a salary lower than Danish building worker by 25-28%(Hansen et Andersen 2008, p. 9). A similar difference has been estimated for Germany by comparing the minimum wage levels with the actual wage levels in the

construction sector. The average hourly gross salary in the building sector of EUR 17,11 (Federal Statistical Office) is in fact 32% higher than the minimum wage for skilled workers and as much as 56% higher for the minimum wage of unskilled workers in West Germany.

Despite such large difference in estimated wage levels in Germany, it is important to stress that in recent years a significant decrease in the number of postings was recorded in the construction sector, which is now less than half of the level of the late 1990s (source: SOKA Bau). This was due to the overall reduction in construction works for both the end of the post-reunification building projects and due to the impact of the recent recession. The total sectoral employment was 3.2 million workers in 1995 which declined to 2.2 million in 2010.

As regards posting in Germany, a compositional shift is apparently emerging, with the share of low-labour cost countries diminishing to the benefit of high-labour cost countries. Particularly striking is, for instance, the decrease in postings from Poland, which slumped from more than 40,000 at the end of the 1990s to significantly less than 20,000 in 2009. In the same period, the relevance of postings from some high-wage countries has increased, like Belgium, the Netherlands and Denmark (Eichhorst 2005). These trends seem to signal a relative weakening of the labour cost driver apparently in favour of geographical proximity and possibly other drivers, such as skill and labour shortages.

Labour and skill shortages are other highly significant drivers of posting. While they are usually the main factors linked to outward postings from high labour cost countries, such as France and Germany (for Germany, Dribbusch 2010), they are also important in a receiving perspective. For instance, most of the relevant cross border activities performed through posting in France along the eastern borders are linked to these divers and are associated with a well-established system of 'cross-border' firms, with a long lasting tradition of operation on the two sides of borders.

In this respect, also the experience of Denmark seems particularly interesting. In the wake of the 2004 enlargement, the posting of workers was considered as a highly positive phenomenon because it helped to face labour shortages, especially linked to the ageing indigenous workforce, and it accommodated the economic boom, thereby avoiding inflationary pressures on domestic wages and salaries. In a sending perspective, Danish construction firms and workers took part and could significantly benefit of the German post-reunification construction boom in the 1990s. In sum, the positive implications of both inward and outward posting were appreciated by Danish actors. Things changed with the start of the economic recession in 2008. Increasing unemployment, especially in the construction sector, and the overall worsening economy, shifted the focus of the public debate on labour cost differentials and notably on the impact of the posting of workers on the 'autonomous' Danish system of industrial relations. The alleged presence of 'sub standard' terms of employment (with the meaning of terms of employment below the Danish collective agreements) and the related lack of a level playfield between Danish and foreign service providers emerged as key issues.

Market integration and trade union membership

According to the multivariate analyses, market integration and trade union membership are drivers of posting, although less relevant, while variables such as productivity and indicators which describe the sectoral dynamics do not play a significant role in posting.

Case studies underline the importance of the link between market integration and posting (which is clearly a two-way connection with self-reinforcing incremental effects). The relevance of market integration is forcefully depicted by the role of geographical proximity outlined above. It is precisely in the areas and between the economies which are better integrated that most of posting occurs. In the case studies, there is reference to outward posting as a complement of external trade, especially of capital goods, and of foreign direct investment for Germany. The relationship with Norway and its oil-driven 'booming' economy is mentioned to illustrate outflows of Danish construction workers. Another example can be found in the UK, where the high share of posted workers in the financial sector can be linked to the importance of London in the global financial market.

Geographical proximity

According to the multivariate analyses, geographical proximity seems to be the most relevant factor (it is not exactly a driver) able to explain the distribution of flows of posting (the direction and the extent of the phenomenon at country level). In some cases, geographical proximity prevails in determining postings over the other drivers. In particular, given geographical proximity and the labour cost convenience, also countries with low unemployment rates and high economic growth exploit posting as a means of market integration and business opportunities.

Geographical proximity as one of the main determinants which structure the distribution of inward and outward postings clearly emerges also from the case studies. In Denmark, an important share of postings systematically concentrates in the southern regions of Fynen and Southern Jutland. In 2009, this area even surpassed the capital region of Copenhagen, with almost 40% of postings, while in general it is the second receiving area with more than 20% of posted workers. In Germany, the meat processing industry, where the presence of posted workers is allegedly high, has important locations in the Lander close to the eastern borders. In France, nearly 60% of the pre-declarations required by the French law are concentrated in the cross-border regions in the North, North-East and South-East of France. This is linked to cross-border activities with Belgium, Luxembourg, Germany and Italy. The main origin and destination of posted workers to/from the UK is France, which accounts for around 40% of all postings to the UK and one third of all UK postings abroad over the 2007-2009 period.

1.3.3 THE BASELINE SCENARIO: A COUNTRY TAXONOMY

The evidence collected and analysed in the previous sub-sections enables to create a country taxonomy based on the drivers and a 'specialisation index'. Such specialisation index is calculated as the net flow of posting (received *minus* sent) weighted for the total number of postings (sent plus received). Table A6 in Annex A shows the value of the index for each

country. Looking at this index, it is easy to identify the net sending and receiving countries (*minus* means 'net sending', *plus* means 'net receiving'). The size of the index indicates that some countries are 'specialised' in sending (high positive values of the index) or in receiving (high negative values of the index), while other countries are similarly involved in the phenomenon in both directions and consequently are 'non specialised'.

For instance, Germany and France which have relevant flows (total number of postings) in both directions are evidently non specialised. For these countries understanding the drivers of the phenomenon might be more complex compared to countries where 'specialisation' is stronger.

In order to build the country taxonomy, countries are clustered according to the specialisation index and the relative level of labour cost (high-low). This is because labour cost allows to make some distinctions in terms of type of posting (skilled/unskilled workers), and sectors (labour intensive/technical) which mostly characterize a certain group of countries. It must be underlined that this does not imply a greater relevance of labour cost as a driver of posting compared to the other drivers included in the analysis.

Although classifying the drivers and grouping countries in this taxonomy imply some necessary simplifications, this exercise allows us to outline more clearly the phenomenon and the related impacts. Table 1.3illustrates the taxonomy used to outline the baseline scenario at country level.

- a) For some highly 'specialised' receiving countries such as Malta and Cyprus, and Greece, which are also characterised by a relatively low labour cost, skill and labour supply shortage are the main driver for receiving postings. In fact, the geographical specificity of their local labour market suggests that, for these countries, posting help to meet labour demand and service provision needs which are not likely to be filled otherwise. Postings generally concern skilled workers and anecdotal evidence seems to support this idea. For instance many posted workers sent to Cyprus work in the financial and banking sector. For these countries, posting should imply positive economic impacts in terms of a positive matching of demand and supply of skills and specialisation. Therefore organisational advantages, increased efficiency thanks to a larger availability of qualified skills and potential learning-effects are likely to be associated to this kind of posting. This situation does not seem to be conducive of social frictions and industrial conflict.
- b) For other 'specialised' receiving countries such as Finland, the Netherlands, Sweden, Belgium, Denmark, where labour costs are particularly high, a natural driver for receiving postings is the reduction in labour costs, notably in labour intensive and low skilled sectors such as construction (Idea Consult 2011). Another possible driver is the unavailability of local workers for low skilled, physically burdensome or risky jobs (food processing, storage and transport or health and social work). Of course, as in all cases, posting is also influenced by other drivers and it is quite common that most of postings occur between high labour cost countries. This can be linked to the effects of geographical proximity and to high-skill shortages. The point here is that problems and

issues on posting concentrate in this group of countries in situations where the reduction in labour costs is predominant. Although indicators of posting specialisation and labour cost are less evident, Austria, Spain, Ireland and Italy can be grouped in this cluster. Surely, for 'specialised' receiving countries, postings have positive effects in terms of reduction in labour costs and increased competitiveness in the relevant sectors, with potential positive effects for utilising firms and, although not necessarily, for consumers¹⁰. However, posting can also give rise to frictions on the local labour market since posted and local workers are in fact competing and labour costs and working conditions of posted workers are more convenient for utilising firms. In that case, posting may imply a virtual displacement effect and pressure on wages and working conditions generally applied to domestic workers in the posting-intensive sectors. However, no evidence on wages and employment of local workers is available at aggregate level. In addition, the role of postings in the overall dynamics of wages and employment of local workers are negligible if compared with the impact of more pervasive phenomena like worker migration or undeclared work. In fact, by looking at the available data concerning immigration in EU27 (see "Key-figures on Europe", Eurostat 2011 and Eurostat data on immigration) the posting of workers – which is measured as number of missions – is much less significant than immigration –measured as number of resident people. On the other hand, shadow economy and the related phenomenon of undeclared work and its effects are certainly more pervasive since the estimation of the 'shadow economy' as percentage of GDP goes from 10.1% of Austria to 44.3% of Latvia (source: CESifo, year 2007. See also GHK and Brodolini 2009).

- c) For 'specialised' sending countries with low labour costs such as Poland, Portugal, Hungary, Estonia, Slovakia and Slovenia, the main drivers for posting workers abroad are economic integration and business or job opportunities. These countries usually post unskilled or medium skilled workers in sectors such as construction, transport, HORECA, social and health work, food processing, and cleaning. The lower labour costs of these countries and, therefore, the competitiveness of workers who are posted from these MSs makes posting easy and convenient. Posting may imply positive effects on local employment, economic integration, and business development. Potentially, for these countries, posting might generate an upward pressure on local wages and salaries. However, no evidence on that is available. Furthermore, independently of posting, a general convergence of labour costs within Europe, although through a partial and slow process, is broadly recognised in the literature (see Abraham 2001, Slander and Ogerovc 2010, and Box B2 in Annex B). Obviously, from their sending perspective, posting does not represent a source of social conflicts, while it does represent a source of employment, market integration and social development.
- d) Luxembourg has a high specialisation as a sending country and a very high labour cost. The driver of posting of Luxembourg is its geographical specificity and the narrow local

¹⁰ Reductions in labour cost can create advantages for consumers, especially in terms of reduction in the prices of goods and services, only if the competition in the relevant sector is sufficiently high.

- labour demand. For this country market integration and job or business opportunities are the main drivers for posting of skilled workers, generally in the banking and financial or business services sectors. In such a case posting workers abroad should imply positive effects in terms of employment, economic integration, business development and does not give rise to social frictions or industrial relation disputes.
- Many other countries are 'non specialised'. They present relevant flows in both directions. Notice that 'non specialised' countries which have high labour costs and have relatively relevant outflows and inflows of posting such as France, Germany and the UK, are very large economies and have a broad labour market. In particular for these countries, all the different drivers for posting come into play and may be identified depending on the type and quality of the workers involved. From a receiving perspective, posting to these countries is significantly driven by the objective of reducing labour costs and concern low skill and labour intensive sectors such as construction, HORECA, food processing, transport, health and social work, and cleaning. This kind of posting is associated with positive effects in terms of reduced labour costs and increased competitiveness in the relevant sectors with potential positive effects for consumers. However, posting can also imply frictions on the local labour market in terms of virtual displacement and pressures on wages and working conditions, applied to domestic workers in the posting-intensive sectors. There is no evidence on wages and employment of local workers at aggregate level. In addition, especially in these large countries, the role of received postings in the overall dynamics of wages and employment of local workers is negligible, if compared with the impact of more extensive phenomena like worker migration or undeclared work (see above). From a sending perspective, these countries are not particularly competitive in terms of labour costs with respect to other EU MSs. In such cases, the main driver related to posting workers abroad is market integration, entry market or extension of service provision and labour shortage in the country of destination. Generally, postings from these countries may involve medium and high skilled workers in manufacturing, often ancillary to exports, banking and finance and business services. As usual from the sending perspective, and especially when skilled workers are involved, this kind of posting does not seem to be a potential source of social or industrial relation conflicts.
- f) Another group of 'non specialised' countries is characterised by low labour costs. This includes Bulgaria, the Czech Republic, Latvia, Lithuania, and Romania. Again, for these countries we can identify two main types of posting depending on the direction of the flow. From a sending perspective, these countries exploit their relative competiveness in terms of labour costs and post generally unskilled or medium skilled workers to sectors such as construction, HORECA, food processing, transport, health and social work, and cleaning. From the sending perspective, the main drivers are market integration and business and job opportunities. Posting can imply positive effect in terms of market and business development, employment creation, and potential upward pressure on local wages and working conditions, without representing a source of social conflicts. From a

receiving perspective, these countries receive flows of skilled workers, in manufacturing, banking and business services, to cover skill shortages with positive effects on job matching, and service market integration. For these countries posting does not seem to be a potential source of relevant conflicts and has widespread positive effects to widen skill availability in growing local markets.

Table 1.3. The baseline scenario – Country taxonomy

Specialisation	Labour costs	Examples	Most relevant drivers	Most relevant sectors	Main social and economic impacts	Legal and administrative problems	Main social and economic issues
Specialised receiving	Low	CY, MT, GR	Skill and labour shortage	Bank Finance Transport Construction	Positive on job matching Economic integration	Weak monitoring and enforcement	Integration and development of the single market of services
Specialised receiving	High	SE, FI, NL, BE, DK, IT, AT, IE, ES	Reduction in labour cost Labour shortage	Construction HORECA Food processing Transport Health Social work Cleaning	Positive on job matching Economic integration Higher competitiveness Higher productivity (advantages for consumers) Potential downward pressure on wages and salaries Potential job displacement	Ambiguities in the definition of posting Ambiguities in the definition of conditions applicable to posted workers Protectionist extension of national legislation Administrative barriers Weak monitoring and enforcement	Integration and development of the single market of services Employment and labour market Industrial relations Protection of workers' rights
Specialised sending	Low	PL, SI, SK, HU, EE, PT	Economic integration Business opportunit. Job opportunit.	Construction HORECA Food process Transport Health Social work Cleaning	Positive effects on employment, Economic integration Business development Potential upward pressure on wages and salaries	Weak monitoring and enforcement	Integration and development of the single market of services Protection of workers' rights
Specialised sending	High	LU	Economic integration Job opportunit.	Banking Finance Business services	Positive effects on employment Economic integration Business development	Protectionist extension of national legislation Administrative barriers Weak monitoring and enforcement	Integration and development of the single market of services

Specialisation	Labour costs	Examples	Most relevant drivers	Most relevant sectors	Main social and economic impacts	Legal and administrative problems	Main economic and social issues
Unspecialised	High	DE, FR, UK	Receiving Reduction in labour cost	Construction HORECA Food processing Transport Health Social work Cleaning	Higher competitiveness Higher productivity (advantages for consumers) Potential downward pressure on wages and salaries Potential job displacement	Ambiguities in the definition of posting Ambiguities in the definition of conditions applicable to posted workers Protectionist extension of national legislation Administrative barriers Weak monitoring and enforcement	Integration and development of the single market of services Employment and labour market Industrial relations Protection of workers' rights
			Sending Economic integration	Manufacturing Banking Finance Business services	Positive effects on employment, economic integration, business development		Integration and development of the single market of services
Unspecialised	Low	BG, CZ, LT, LV, RO	Receiving Skill shortage	Banking Finance Business services	Positive job matching Economic integration		Integration and development of the single market of services
			Sending Economic integration Job opportunit.	Construction HORECA Food process. Transport Health Social work Cleaning	Positive effects on employment, Economic integration Business development Potential upward pressure on wages and salaries	Weak monitoring and enforcement	Integration and development of the single market of services Protection of workers' rights

If we analyse the legal and administrative problems and the economic and social issues, (see section 1.2) as they emerge in the baseline scenario (Table 1.3, column 7-8), it becomes clear that, while some of them are truly transversal and affect all countries, most of them become relevant only in some groups of countries as defined in terms of specialization and are limited to some types of posting.

The country taxonomy points to some key aspects of posting:

- 1. The posting of workers has contributed to the integration of the transnational EU market of services. However, difficulties in implementation and enforcement of the PWD and social frictions related to posting may have hampered the potential of posting.
- 2. The transnational provision of services through posted workers produces significant positive effects on the economies of both sending and receiving countries, such as the provision of more business and job opportunities and market integration, especially in sending countries, and the improvement of competitiveness and market integration in receiving countries.
- 3. Posting is rarely a source of conflicts from a sending perspective, since it can produce a number of positive impacts on the sending economy and labour market and from the social point of view. In fact, it does not seem to be a potential source of tension and conflict, since posted workers can benefit from the status of 'expatriate' (skilled workers) or from the minimum protections applicable in the receiving MSs (unskilled workers). Therefore, posting not only can favour market integration of the sending countries, but also social cohesion across the EU.
- 4. The particular relevance of the main legal problems in some receiving high labour cost countries originates from two important aspects: on the one hand, the balance between legislation and collective bargaining in regulating employment; on the other, the extent of the application of national labour regulation to posted workers. The larger the autonomous role of collective bargaining as opposed to legislation (as in Sweden and Denmark), the more extensive the application of national rules to posted workers (as in Luxembourg), the more controversies and problems arise. In these situations the ambiguities of some provisions, like the applicability of collective agreements or the concept of 'public policy provisions', become more evident and far reaching.
- 5. Abuse and administrative difficulties of enforcement become particularly evident in a receiving perspective in countries with high labour costs, although they can involve all MSs. In fact, the attractiveness of posting from low-labour cost to high-labour-cost countries can induce opportunistic actors to exploit the regulatory system with a view to circumventing national regulations through 'fake' or 'borderline' postings, as in the case of 'letterbox companies', or through an outright disregard of the rules on posting.

1.3.4 THE BASELINE SCENARIO: BENEFITS AND COSTS BY ACTORS

The theoretical framework adopted for this study analyses the impacts of the different policy options on the basis of their effects on the incentive structure (benefits and costs) related to the posting of workers for the various involved actors. The analytical framework and the evidence coming from the case studies contribute to focus on specific areas of intervention to see whether the Policy options can change the underlying incentive and regulatory structure and help to solve the problems.

Benefits and costs by actors in the baseline scenario are detailed below by distinguishing between sending and receiving perspectives.

Table 1.4. Costs and benefits by actors

Actors	Benefits	Costs
MS sending	Economic growth and job creation (through market integration) Upgrading of skills and know-how Social and economic integration	Social dumping in case of distortions and abuse related to postings Costs of monitoring and enforcement related to the PWD, especially coordination with receiving MSs Upward wage pressures
MS receiving	Economic growth and job creation (through market integration) Competitiveness (through productive efficiency induces by reduction in labour costs, and allocative efficiency related to reduction in skill/specialisation and labour shortages) Social and economic integration	Conflicts between different groups of workers Institutional and legal disputes Costs of monitoring and enforcement related to the PWD
Firm sending	Business development Entry market	Organisational, administrative, and compliance costs related to posting
Firm receiving	Competitiveness(through productive efficiency induces by reduction in labour costs, and allocative efficiency related to reductions in skill/specialisation and labour shortages) Upgrading of skills and know-how (through improved skill and specialisation matching)	Organisational, administrative, and compliance costs related to posting Conflicts with local workers and trade unions Unfair competition related to abuse and distortions (social dumping)
Workers receiving	Job creation (through economic growth and competitiveness)	Potential job displacement Potential downward wage pressures Social dumping related to abuse and distortions
Workers sending	Employment Upward employment and working conditions Upgrading of skills and know-how	Mobility costs (monetary and non-monetary) Exploitation related to abuse and distortions
Trade unions sending	Spill-over on trade union membership and practices	No significant costs
Trade union receiving	Involvement of indigenous workers in posting- related issues Extension to posted workers of union representation	Weakening of trade union role (through limits in the regulation of posted workers' terms of employment)

Member States

From **sending perspective**, posting represents a means which favours the transnational provision of services and implies benefits on local employment, economic integration, and business development. Therefore, posting fosters economic growth and then employment creation with a general upgrading of professional skills and know-how favoured by experience abroad. These benefits support the social and economic integration at EU-level, especially by the inclusion of high-unemployment and bordering regions where posting may improve growth opportunities. Sending countries bear the costs of coordination to ensure effective controls of abuse in receiving countries.

From a **receiving perspective**, the discussion of the baseline scenario has underlined that the benefits and costs of posting strongly depend on the drivers and types of workers involved.

Posting surely represents a relevant source of competitiveness for national economies. The competitiveness of sectors in fact relies on firms' capacity to offer services at competitive prices - given a certain level of quality - or to obtain greater returns on the resources employed in providing services including labour – given a certain level of prices. Posting of skilled or specialised workers favours job matching and market integration. This promotes the competiveness of the involved sectors by increasing the allocative efficiency of labour force. This type of efficiency fosters economic growth and employment creation, without producing relevant social frictions. Even when posting is mainly driven by labour costs, it produces benefits, since reductions in labour costs are translated into greater competiveness of utilising firms with potential advantages for consumers. The competitive pressure determined by lower labour costs can favour productive efficiency (less input for the same output) at sectoral level, as a reaction of firms which do not use posting. Therefore, posting generally promotes sectoral efficiency (organisational efficiency, productivity, reduction in overall production costs, etc.). However, besides these gains in efficiency and competitiveness, posting driven by labour costs can also involve social costs. The latter are actually related to the potential conflicts between different types of workers (local vs posted) or at institutional level (industrial relations conflicts and legal disputes even at EU-level – as illustrated by ECJ cases related to the posting of workers).

The benefits of posting for receiving countries may be reduced in cases of 'unfair' competition based on distortions and abuse, which can create further social conflicts and deteriorate the socio-economic conditions in receiving regions/sectors by displacing local firms and workers.

MSs bear the costs of monitoring and enforcement (labour inspections related to posting, etc.) as well the costs of coordination (provisions of the necessary information concerning posting at transnational level).

Firms

Business opportunities and market integration are the main drivers for posting firms from **sending perspective**. Posting in fact represents a means to entry new markets and to

extend the transnational provision of services. Weak demand in the home countries, a high supply of low cost labour, and geographical proximity explain why posting involves specific geographical areas, sectors and workers. Especially in the case of SMEs, posting allows to exploit the learning potential attached to business growth and consolidation in foreign markets, thereby contributing to the integration of the market of services.

Posting involves organisational, administrative and compliance costs which, if excessively high, might hinder the use of posted workers. The general increase of posting, especially during the economic expansion indicates that benefits in terms of business development and market integration overcome organisational and administrative costs.

Since the main drivers of posting for *receiving firms* are labour costs, skills and specialisation shortages and market integration, utilising firms are able to reduce labour costs and skills and labour shortages. Posted workers are often less costly, more flexible, work harder and are less unionised than local workers; furthermore, they allow overcoming skill shortages without having to invest in specific training. Therefore, posting can imply relevant organisational and economic advantages by increasing both allocative and productive efficiency (see above). This implies a positive competition pressure in the relevant sectors resulting in overall greater market competiveness.

The main costs are associated to organisational, coordination, administrative and compliance procedures related to posting and, especially, to potential liability in cases of long chains of subcontracting and to the risks of conflicts with workers or trade unions, which may produce monetary and non monetary costs (i.e. reputational costs). Such costs, if excessively high, might hinder the use of posted workers. The general increase of posting, especially during the economic expansion indicates that benefits in terms of business development and market integration overcome organisational and administrative costs.

Local firms in receiving countries might be positively affected if they are users of products and services provided by firms utilising postings. On the other hand some local firms may be displaced by posting firms and firms utilising postings. The displacement effects on local firms is clearly negative when they are determined by 'unfair' competition associated to abuse or distortions of posting; otherwise, they should be considered as the ordinary outcome of the selection mechanism of competition.

Workers

From **sending perspective**, posting represents a good opportunity for all posted workers. Posted workers benefit of new job opportunities abroad. If skilled and specialised, posted workers usually benefit of the status of 'expatriate' and of more favourable working and employment conditions compared to working in their home country. If unskilled – and therefore usually coming from low-labour cost countries –, they are protected by the application of the PWD (minimum protections applicable in the receiving country). In addition, posted workers can substantially improve their skills and market position from the work experience acquired in other countries. For posted workers, posting involves a number

of monetary and non-monetary costs related to mobility. However, the benefits of employment abroad through posting are likely to overcome mobility costs.

Especially in the case of abuse and distortions, posted workers are sometimes described as experiencing very hard working conditions: the case studies and the available literature in certain sectors, such as construction and agriculture, indicate long working hours, unsafe working conditions, social isolation due to linguistic and cultural barriers, but also, in some cases, due to physical isolation from local workers. These conditions are exacerbated in cases of low skilled workers posted in the construction and food processing sectors and when abuse is present. In these cases, often housing and transportation are provided at high costs by the same posting firm or agency. Furthermore, the risks of unsafe and unhealthy working conditions are particularly high and workers protection is made harder by the difficulty of the receiving MSs labour law enforcement bodies and trade unions to reach and communicate with posted workers. The present lower growth prospects (late 2011) and increased competitive pressures are likely to negatively impact on the working and wage conditions of low skilled posted workers.

Local workers of sending countries may indirectly benefit from posting, especially in low labour costs countries, because the phenomenon might generate an upward pressure on local wages and salaries, and generally can promote the local economic development.

From **receiving perspective**, local workers are probably the actors who mostly perceive the potential trade-offs related to the posting of workers. However, posting of skilled workers driven by skills or specialisation shortages or posting of unskilled workers solely driven by labour shortages or market integration purposes are not conducive to frictions between local and posted workers, since the former do not compete with the latter. In such cases also local workers can benefit of the overall positive economic effects related to the posting of workers. This is particularly true when their job and activities are complement to those performed by posted workers.

On the other hand, local workers are negatively affected by posting when substitution effects emerge. This can occurs when posting is mainly driven by labour cost and local and posted workers virtually compete. In that case, posted workers are typically more convenient for utilising firms and this may imply virtual displacement effects and downward pressures on wages and working conditions generally applied to domestic workers in the posting-intensive sectors.

Trade Unions

Trade unions in **receiving countries**, as representative of local workers, are concerned with the possible job displacement effects and the downward pressures on wages and working conditions for domestic workers (which they often refer as 'social dumping', which is used in this study only with reference to consequences of abuse and distortions and the related unfair competition). The case studies and the applied literature show that industrial conflict over posted workers often focus on working conditions, but, in some cases, the issue

is the substitution of local workers with posted workers (as in the Lindsey case in the UK, see Annex E).

Trade unions in **sending countries** may be positively affected by the workers' experience in foreign countries with an increase in union's membership and learning of different union practices.

2. OBJECTIVES

The general objectives of the legislative interventions are to strengthen the supportive framework for the transnational provision of services and to ensure a conducive environment for social cohesion and in particular an adequate level of protection of posted workers.

Specific objectives concern:

- The further reduction of barriers to the development of the transnational provision of services:
- The reduction of opportunistic and illicit behaviour to circumvent the national implementation rules;
- The improvement of enforcement mechanisms and international administrative cooperation across MSs;
- The clarification of the scope of collective bargaining and industrial relations in the regulation of the employment and working conditions of posted workers.

Operational objectives include:

- The elimination of the limits to the full exploitation of posting for the development of the transnational provision of services, especially ambiguities, protectionist behaviours and unnecessary administrative burdens, without increasing regulatory barriers;
- A more precise definition of posting (e.g. definition of 'place of habitual work', 'temporariness of services') to reduce distortions and abuse of posting;
- The involvement of social partners in monitoring to provide a sort of 'watchdog' for inspection services;
- The creation of forms of institutional support for posted workers in order to make the protection of their rights more effective;
- A specification of the administrative cooperation obligations for MSs, with effective sanctions in case of non-compliance;
- The definition of the international effectiveness of sanctions applied by MSs;
- The joint liability of posting and utilising firms for abidance with EU and national provisions.

3. POLICY OPTIONS

The policy options are the instrument to address the legal and administrative problems as well as the economic and social issues by changing the regulatory framework. Clarifying the definition of posting and improving enforcement mechanisms will help enhance the use of this instrument and reduce distortions and abuse; specifying the applicability of collective agreements may help reduce controversies; a clearer notion of 'public policy provisions' and administrative obligations in the field of posting would reduce legal uncertainty and possibly decrease the burdens on posting for the utilising firms.

In this section, the policy options will be presented and discussed in terms of their capacity to address the different problems, as well as in terms of their subsidiarity, proportionality, feasibility and implementation. Starting from the Terms of Reference, the selection of possible contents is carried out on the basis of a legal study, taking into consideration the overall objectives of fostering economic integration and strengthening social cohesion, so that the 'best' or 'more balanced' components are chosen. The proposed contents which could be included in the Policy options are assessed in Section 4.

Once the suitable contents of each policy option have been selected, new information obligations (IOs) and related new administrative actions implied by the introduction of the new provisions are identified. The identification of the new IOs and the required administrative actions follows the classification proposed by the EC Impact Assessment Guidelines (2009, see Annex 10) and allows the quantification of the administrative burdens imposed by the EU legislation on each target group –public administrations and/or firms – as carried out in Section 4.

3.1 OPTION 1. NO FURTHER SPECIFIC ACTION

In case of no further specific actions, no interventions will be taken at EU-level, while adjustments may take place at national level. In terms of the capacity to address the various problems, this is obviously limited by lack of any action. However, some impacts may derive from measures taken at national level, learning-by-doing and trial and error processes both at national and EU-level, a progressive clarification of the regulatory framework through the further elaboration of ECJ case-law, bilateral agreements and international cooperation, and unilateral initiatives in the implementation of monitoring systems, such as LIMOSA and RUT-Register.

As for feasibility, this option is technically and politically viable – despite the wide debate on posting at EU-level – since it does not require any action and does not affect the present balance between economic freedom and social cohesion included in the PWD. As illustrated by the case studies, social partners, especially employers, are often reluctant to change the existing framework, because of the uncertainty around the modifications that would be eventually implemented.

3.2 OPTION 2. CLARIFICATION OF PRESENT LEGAL FRAMEWORK BY WAY OF A COMMUNICATION PLUS A RECOMMENDATION

Option 2 aims at clarifying the interpretation of articles 4 and 5 of the PWD to improve administrative cooperation among MSs and their Labour Inspectorates and to facilitate the access to information on conditions which must be applied to posted workers and to support monitoring of those effectively applied. The Commission already adopted an initiative in this field in 2006 by establishing a set of guidelines on the admissible national control measures of posting of workers by host country authorities in compliance with ECJ jurisprudence.

This option does not change or modify any part of the text of the PWD. Therefore, a Communication, even if strengthened by a Recommendation, does not impose binding and enforceable obligations on MSs to comply with the Commission's clarifications in the implementation of the PWD in their national legislation. In fact, the former communications adopted by the Commission do not seem to have produced any relevant changes in the national regulation of administrative controls and cooperation and/or on the conduct/praxis of the competent authorities.

3.2.1 CAPACITY TO ADDRESS LEGAL AND ADMINISTRATIVE PROBLEMS

A clarification of the contents of the PWD by way of a communication or a recommendation from the Commission has a low capacity to address the ambiguities in the definition of posting and in the conditions applicable to posted workers. In fact, clarifying by means of a simple Communication, even if reinforced by a Recommendation, reproduces the uncertainty arising from the judicial interpretation and application of European Union law as it stands today.

With respect to the protectionist extension of national provisions, the negligible capacity of Option 2 to limit such behaviour is linked to the non-binding nature of the clarifications.

The capacity to affect monitoring and enforcement is low, since Option 2 reiterates what the Commission has already done with Communications COM (2006) 159 and COM (2007) 304. Similarly, in Recommendation 2008 the Commission already drew the attention of MSs to take the necessary measures and make the required efforts to increase their efforts to enhance access to the information on the terms and conditions of employment, to ensure that their liaison offices are in a position to carry out their tasks effectively and to participate actively in a systematic and formal process of identification and exchange of good practice in the field of posting of workers through forums of cooperation established by the Commission to that end, such as the Expert Committee. Therefore, Option 2 has not the capacity to achieve further results in this field.

3.2.2 CAPACITY TO ADDRESS ECONOMIC ISSUES

This option does not imply additional barriers to the transnational provision of services. By clarifying and limiting the administrative burdens for posting firms, this option can favour the transnational provision of services by reducing regulatory uncertainty and the scope of

administrative obligations. As long as it enhances controls and strengthens administrative cooperation, Option 2 can help to enforce the PWD and the national implementation legislation by partially reducing distortions and abuse in the posting of workers.

However, the capacity to achieve these results can be frustrated by the absence of any binding measures and sanctions to ensure the full compliance of the MSs with the clarifications.

3.2.3 CAPACITY TO ADDRESS SOCIAL ISSUES

This option clearly does not tackle the social issues related to posting, in particular, the controversies on industrial relations. However, the potential reduction of distortions and abuse in posting and the improvement in the protection of posted workers' rights, as a result of enhanced regulatory certainty, may help to reduce social tensions around posting. Again, the capacity to achieve these results can be frustrated by the absence of any binding measures and sanctions.

3.2.4 Subsidiarity, proportionality, feasibility and implementation

The weakness of this option is also its main strength. In fact this "soft" intervention at EU level fully respects the principle of subsidiarity leaving to MSs a wide range of choices in implementing administrative controls and cooperation. In addition, the option seems to be proportional to the scope of the PWD without producing any significant restrictions on the freedom of movement of services. Finally, it is easily feasible because it does not need an EU Council or an EU Parliament vote and does not seem to pose any particular problems for MSs both from a sending and a receiving perspective since it maintains the present balance of interests established by articles 3.1.

3.2.5 SELECTION OF CONTENTS ON THE BASIS OF EFFECTIVENESS, EFFICIENCY, AND CONSISTENCY WITH THE OBJECTIVES

The Communication shall include:

- a. A list of all admissible systems of notification in accordance with the most recent ECJ jurisprudence (see Palhota ruling¹¹).
- b. The inspections that receiving MSs can carry out.
- c. The administrative requirements that can be imposed on posting firms without discriminating them.
- d. The measures the MSs can adopt to provide information on the regulation of posting and the conditions and terms of employment applicable to posted workers.
- e. As for the clarification of minimum pay rates, the indication that, in order to comply with art. 3 of the PWD, national authorities shall state in a precise and accessible way the minimum rate of pay that must be applied to posted workers in each branch covered by the national legislation implementing the PWD.

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¹¹Palhota, ECJ case C-515/2008, Judgement of 7 October 2010.

- f. A clarification of allowances and supplements paid by the service provider to posted workers (e.g. to carry out additional work or to work under particular conditions). These cannot be taken into account for the purpose of calculating the minimum rate of pay as defined by the host MS, if this is not explicitly provided by the implementing legislation.
- g. The indication that the PWD cannot be interpreted in a way which allows the host MS to subordinate the provision of services in its territory to terms and conditions of employment which go beyond the mandatory rules for minimum protection stated in Art. 3.1 (Laval doctrine).

3.2.6 NEW INFORMATION OBLIGATION AND REQUIRED ADMINISTRATIVE ACTIONS

Since this option only includes a number of clarifications concerning the existing regulation implied by the PWD, it does not involve new information obligation at EU level. No new specific administrative actions by public administrations and firms are required.

3.2.7 COMPLETENESS AND OVERALL CAPACITY TO ADDRESS THE PROBLEMS

By increasing certainty in the application of the PWD, the overall capacity of Option 2 to address economic and social issues is negligible. Its main limit is its weak ability to condition directly and effectively the MSs' application of the PWD and to bind national authorities to implement administrative controls and cooperation.

3.2.8 Type of intervention (Communication, Recommendation, Regulation, Directive)

Option 2 is implemented through a Communication. Should this option be chosen as the preferable action, it is advisable to accompany the Communication with a Recommendation, in order to increase its effectiveness.

3.3 OPTION 3. A PARTIAL REVIEW OF DIRECTIVE 96/71, AMENDING ONLY ARTICLES 4-6 OF THE CURRENT DIRECTIVE - IMPROVING APPLICATION, COMPLIANCE AND ENFORCEMENT IN PRACTICE

This option partially modifies the PWD by amending articles 4, 5 and 6, with the aim to improve the application, compliance and enforcement of the Directive, preserving the present balance of interests established by Article 3.1.

This option significantly modifies the present regulatory framework. It includes broad and detailed binding provisions: a system of administrative controls, measures of cooperation among national authorities, information exchange tools, sanctions in the case of non-compliance, and institutional support for the protection of the rights of posted workers. In this way, it reduces the discretion of the MSs in implementing the PWD. In addition, this option promotes the harmonisation of national systems under the supervision of EU-level institutions.

3.3.1 CAPACITY TO ADDRESS LEGAL AND ADMINISTRATIVE PROBLEMS

This option can tackle administrative problems in a significant manner, since the selection of contents allows the introduction of a number of binding measures which strengthen monitoring and enforcement and therefore keep administrative burdens to a minimum. Although it does not revise Art. 1-3 of the PWD, it can indirectly address the ambiguities in the regulatory framework, because an *ex ante* declaration system ensures an explicit indication of the temporariness of services and enables a more effective monitoring of the conditions applied to posted workers. In fact, since the declaration does not provide any guarantees on the actual duration of posting, only checks and inspections on the spot, for instance of documents either available or shipped over for the purpose of a specific control, can be effective to monitor the information provided through the *ex-ante* declaration. The combination of this system with the requirement to keep a copy of a limited number of documents proving the dates of start and foreseeable end of the mission of every posted worker and their terms of pay and working time can significantly strengthen the capacity of MS labour inspectorates to enforce the fulfilment of PWD obligations and to cooperate with corrisponding offices in sending countries.

The capacity of this policy option to address the problem of the protectionist utilisation of the 'public policy provisions' of Art.3.10 is negligible. In fact, the amendment of Art. 4-6 cannot provide any substantial clarification of the meaning of national mandatory provisions after the judgement of the ECJ in the *Luxembourg* case.

3.3.2 CAPACITY TO ADDRESS ECONOMIC ISSUES

Policy option 3 has the capacity to support the integration and development of the single market of services. In fact, the improvement of monitoring and enforcement of the PWD reduces the scope for unfair competition. A context of genuine posting can contribute to the full exploitation of the potential of posting for economic integration. However, the design of the new monitoring and enforcement measures is critical as, if they introduce unnecessary burdens for firms, it could become a barrier for the transnational provision of services. The selection of contents allows proposing the basic features of such system, which are illustrated in Table 3.1. The cases of LIMOSA and RUT-Register extensively illustrated in Annex C support the conclusion that well-designed monitoring tools can help to improve enforcement without hampering the use of posting.

3.3.3 CAPACITY TO ADDRESS SOCIAL ISSUES

This option can effectively help to eliminate distortions and abuse in the posting of workers, thereby increasing both the protection of posted workers' rights – directly – and of indigenous workers – indirectly. While the capacity concerning posted workers derives from the implementation of the monitoring and enforcement tools, the capacity regarding indigenous workers is a consequence of the general enhancement of the legal context of labour relations.

This option does not have the capacity to address the dimension of industrial relations.

3.3.4 Subsidiarity, proportionality, feasibility and implementation

This option does not pose problem in terms of the distribution of competences between EU and MSs since it confirms the balance of interests established by article 3.1 of PWD and focuses only on measures to ensure its implementation.

The need to harmonise and enforce the administrative measures adopted by MSs justifies this normative intervention at EU-level since these two objectives cannot be guaranteed solely at national level.

The implementation of this option may result in a political deadlock. In fact, even a partial modification of the PWD needs a qualified majority vote in the Council. Therefore, even if the Commission proposal is limited to a modification of articles 4-6, the discussion within the Council may be extended without limitations to the whole PWD. This may lead to problems of political feasibility, since MSs may hold different positions on the various aspects of the PWD.

3.3.5 SELECTION OF CONTENTS ON THE BASIS OF EFFECTIVENESS, EFFICIENCY, AND CONSISTENCY WITH THE OBJECTIVES

Articles 4-6 of Directive 96/71 contain a number of obligations formulated in rather general terms for MSs to ensure implementation, application, and enforcement in practice of the PWD. One of the major problems of the Directive is the lack of adequate and effective compliance and enforcement. Therefore, binding interventions in this field can be effective. The "harder" nature of the regulation implied by these interventions compared to Option 2 (and 1) must be carefully considered due to the potential impacts on the drivers of posting and therefore on the transnational provision of services. In particular, the system of sanctions and administrative controls must not become a barrier to firms sending and utilising posted workers. The provision of a common internet declaration system containing the essential information about posting and the measures indicated below, but excluding forms of prior authorization or registration and controls, can achieve the objectives without introducing barriers.

The two case studies on monitoring tools show that posting is seemingly not affected by the on-line notification systems introduced with LIMOSA and the RUT-Register. Inspection authorities, but also social partners, significantly rely on the effectiveness of such monitoring tools to improve the regulation of posting. There are indications for Belgium that LIMOSA significantly improved the quality of information on posting and therefore the capacity to focus on risk-based controls, so that their effectiveness has increased, with a higher detection rate of abuse and violations. Moreover, in both cases, the new systems replaced former declaration procedures which imposed more obligations on companies with less 'returns' in terms of monitoring capacity. The new on-line systems seem to have a

significant potential for reducing costs and burdens and, n perspective, for improving administrative cooperation.

The modifications of the regulatory framework to be included in this option are:

- a. An obligation for MS to set up a comprehensive system to inform posting companies about conditions applicable to posted workers. Information must include the various elements that make up minimum pay and their entity in order to guarantee the posting company's conduct with regard to pay and provide labour ispectorates with clear terms of comparison.
- b. A joint liability on the receiving company (therefore excluding individuals) in fulfilling the obligation to respect host MS minimum pay (in the case *Wolf Muller*, ECJ considered this measure fully compatible with art. 56 TFEU).
- c. An obligation for MS to join a common EU-wide system of ex-ante declaration of posting. The declaration must provide a number of essential indications about the start and forseeable end of the service and of individual postings, the hourly rates of pay, the weekly working hours, and the place of work. In case the foreseeable period of service exceeds 24 months, a reinforced and qualified obligation could be introduced.
 - This system of ex-ante declaration is designed with a view to keep administrative burdens to a minimum (see Table 3.1).
 - The notification obligation on behalf of the sending firm is reinforced by introducing a joint liability on the receiving firm (excluding individuals) in order to strengthen the effective enforcement of the duty to inform on the temporary nature of service and posting.
- d. Administrative sanctions to effectively dissuade violations of PWD obligations by posting undertakings. These sanction must be enforceable at transnational level to guarantee their full enforcement. It is not advisable to impose the adoption of criminal sanctions insofar as such a provision in the PWD would seriously risk violating MSs' competences.
- e. An obligation to keep in host MSs a copy of the documents deemed essential to prove terms and conditions of employment of posted workers, as for the current regulation of posting. This measure would facilitate administrative controls on the fulfillment of obligations of art. 3.1. and art. 3.10. As clarified in the *Palhota* case, ECJ considers this measure compatible with art. 56 TFEU.
- f. Another advisable measure is to oblige MSs to grant their trade unions the right to denounce violations and to act before the courts to obtain the application of sanctions.
- g. Finally, although not decisive, the establishment of an administrative Commission at EU level to promote the exchange of experiences and best administrative practices, with similar tasks and role as the Administrative Commission for the Coordination of Social Security Systems under Regulation 1408/71, could help to achieve the objective of the action.

3.3.6 NEW INFORMATION OBLIGATION AND REQUIRED ADMINISTRATIVE ACTIONS

The selected contents illustrated above involve new IOs and compliance costs only for provisions from a. to c. New IOs and related new administrative actions both for national public administrations (PA) and for firms are determined as follows:

a. In order to set up a comprehensive system to inform posting companies about conditions applicable to posted workers, MSs shall provide such information in print, since, in order to make the information generally available as required by the PWD, the availability of internet access for all interested parties cannot be taken for granted. The translation of the relevant information in some European language should be also considered part of the new IO (we assume 4 languages: English, French, German, and the most relevant language from a receiving perspective). Therefore the new IOs and the corresponding required administrative actions are the follows:

Required admin. action: description	Type of IO	Type of admin. action	Target
Preparation of the information to be included in the leaflet	Not labelling information for third parties	Designing info. materials	PA
2. Translation of the information	Not labelling information for third parties	Designing info. materials	PA
3. Printing of the leaflet	Not labelling information for third parties	Copying	PA

This provision introduces new IOs at EU level since it explicitly obliges MSs to deliver information through leaflets in different languages. However, according to the existing Art. 4.3 PWD, "MSs must take the appropriate measures to inform on the conditions of employment referred to Art. 3 PWD". According to Muller (2011), many MSs already provide relevant information through web-sites and often information is translated in a number of languages.

b. Since the present PWD does not include any provision on the **joint liability** of contractors for the application by subcontractors of **minimum rates of pay**, this provision may create new compliance costs for receiving firms (RF). In practice, they may have to bear higher selection and monitoring costs in order to make sure subcontractors abide by the new rules:

Required action: description	Description of costs	Type of costs	Target
1. Contractors ensure the application of	Selection and monitoring	Compliance costs	RF
minimum pay by subcontractor	costs		

In some countries, forms of joint liability to guarantee the application of minimum pay already exist according to the national law. For such countries the new compliance costs deriving from the revision of the PWD would substitute existing costs imposed by other level of legislation.

c. The present PWD does not include any provision on the presence of an **ex-ante declaration of posting**. Therefore a revision of the PWD which includes the obligation for MSs to set up a prior declaration system of posting involves new IOs and requires a number of administrative actions for public authorities, sending firms (SF), and receiving firms (RF):

Required admin. action: description	Type of IO	Type of admin. action	Target
Set up of the monitoring system	Other	Buying IT equipment & supplies	PA
Operation of the monitoring system (maintenance and staff)	Other	Other	PA
3. Operation of the monitoring system (notification related activities)	Notification of activity	Other	PA
4. Information campaign on the monitoring system	Non labelling information for third parties	Familiarising with the information obligation	PA
5. Notification of posting	Notification of activity	Submitting information to the relevant authorities	SF
6. Contractors monitors the compliance with the obligation duties	Inspection on behalf of public administration	Inspecting and checking	RF

It should be noticed that notification systems are already in place in a number of countries on the base of national regulations. For these countries the new IOs and the related administrative actions implied by the revision of the PWD would substitute (totally or partially, depending on the type of notification system) the current obligations determined at national level.

This is the case, for instance, of Belgium and Denmark where on line system of notification are already operating: no relevant difference would be determined by the new provisions, nor for public authorities, nor for firms. Also for many other countries, like France and Germany, where non-on line notification systems already exists, these new IOs at EU level only partially modify the obligations currently faced by public administrations and firms

The introduction of a joint liability for the receiving company in order to strengthen the notification obligation creates a new information obligation for firms, since they have, in practice to carry out a sort of inspection on behalf of the public authorities, to be certain of the subcontractors' compliance with the notification duties.

However, in some national practices where the notification system of posting already exists, this form of joint libaility has been introduced (Belgium and Denmark). Therefore, for some countries, the intodroduction of this IO and the related administrative action at EU level wouTable 3.1 summarises the features of a system of ex-ante declaration designed with a view to keep administrative burdens to a minimum. These features have been selected on the basis of the evidence collected through the cases studies on LIMOSA and RUT-Register (Annex C).

3.3.7 COMPLETENESS AND OVERALL CAPACITY TO ADDRESS THE PROBLEMS

This option permits a better implementation and application of the PWD than option 2. In fact, it increases the capacity of MSs to detect and sanction distortions and abuse while avoiding any legal limitations of genuine posting. Therefore, this helps to eliminate the most problematic and socially sensitive cases, but cannot fully address the legal problems linked to the definition of posting, the applicability of collective agreements, and the definition of 'public policy provisions'.

3.3.8 Type of intervention (Communication, Recommendation, Regulation, Directive)

This option requires the adoption of a Directive which would amend the original PWD.

Table 3.1. Recommended features of the on-line notification system $% \mathbf{r}_{1}$

Features	Details	Comments
Type of declaration	Mandatory on line and ex ante	It reduces admin. costs thanks to web- based technologies. It does not entail any form of authorisation in order to avoid barriers to the transnational provision of services
Mandatory information on the service	Date of start and foreseeable end of the project, number of posted workers involved in the project, sector and type of service provided	To favour the monitoring on the actual temporary nature of the service provided through posting
Mandatory information on the sending firm	Identification data on the sending firm	To allow monitoring on the employment relationship between employer and worker To allow the application of sanctions and liability system.
Mandatory information on the utilising firm	Identification data on the utilising firm	To identify sub-contracting chains and allow the application of the joint liability To allow inspections and controls concerning safety and correctness of working and employment condition
Mandatory information on the posted workers	Gender, age, habitual place of work, tasks involved in the project, place of work in the receiving country, hourly pay, working hours	For social security and statistical purposes
Language	Multilingual	Language must not represent an obstacle to posting and the related notification To favour self-declarations.
Accessibility	Web-based technologies, stable and well- functioning with clear information and procedures	To reduce costs of compliance and favour the use of the system
Duration of the on line procedure	No more than 15-30 minutes necessary for the first declaration	To reduce costs of compliance and favour the use of the system
Exemptions	Intra-company short posting (less than 3 months)	To reduce costs of compliance and simplify the procedure for this type of posting
	Participants in seminars and artistic event, Athletes, consultants for less than 1 week Cabotage transport (Reg. 1072/09 EC).	To avoid unnecessary restrictions in fields where mobility is intrinsic to the involved activity
Multiple notifications	Once recorded, identification data on firms and workers can be retrieved	To reduce costs of compliance and favour the use of the system
Assistance	Help-desk with the possibility to register also through phone call	To reduce costs of compliance and make notification a usual and 'normal' duty involved in the transnational provision of services
Utilisation of data	Complete access for authorities such as Labour Inspectorates, and Social Security Authorities	To favour monitoring, controls, cooperation, and enforcement
Publicity of data	Number of postings and aggregate demographic data of the workers involved (gender, age) Aggregate data on sectors/tasks involved, sending countries, receiving regions, duration	For information purposes
Sanctions	Sufficient to discourage non-compliance Applicable at transnational level	To favour compliance and effective enforcement of the duty of notification
Joint liability	Sending and receiving firms must be considered jointly liable in the duty of notification	To favour compliance and effective enforcement of the duty of notification

3.4 OPTION 4. A SEPARATE, NEW LEGISLATIVE INITIATIVE ENHANCING THE APPLICATION AND ENFORCEMENT IN PRACTICE OF DIRECTIVE 96/71/EC

Policy options 3 and 4 have the same regulatory contents. The essential difference between the two lies in the type of intervention and, as a consequence, the possibility to extend the legal basis of the modifications. While Policy option 3 aims at amending and re-writing the text of Articles 4-6 of Directive 96/71, Policy option 4 introduces the same measures through a different and new regulatory device: a new Directive to be adopted and based on the same legislative ground of Articles 53 and 62 TFEU (the current legislative base of the PWD).

It must be stressed that modifying the legal base would have no impact on the scope of the content of the Option. In fact, insofar as this reform is limited to the enforcement measures now regulated by Art. 4-6, a different legal basis would not change the contents of the proposed interventions significantly as the modification of the legal base is irrelevant in this respect.

Therefore, all the considerations in the previous section concerning the capacity to address the legal and administrative problems, the economic and social issues remain the same. Also in terms of new IOs and required administrative actions, Policy option 4 corresponds to Policy option 3. The essential difference refers to the technical and political feasibility of this option. Adopting a new act would limit the debate within the Council to the conditions of application and enforcement of the PWD (Art. 4, 5 and 6), preventing a possibile discussion of other parts of the PWD and making it politically more feasible than Option 3.

3.4.1 Type of intervention (Communication, Recommendation, Regulation, Directive)

As this option requires the adoption of a Directive under the codecision procedure with the same legal basis as the PWD (Articles 53 and 62 TFEU), it cannot be implemented on the grounds of Article 115 TFEU and Article 114 TFEU because option 4 affects the rights of workers.

3.5 OPTION 5. A WIDE-RANGING REVIEW OF DIRECTIVE 96/71

Besides the already identified interventions described for Option 3 and 4, Option 5 also modifies the content of Art. 1-3. In addition to the objective of facilitating the cross-border provision of services, this revision aims to guarantee the protection of workers more explicitly. The regulatory philosophy underlying this policy option is based on shifting the overall equilibrium of the Directive towards an enhanced protection of posted workers. This implies a more precise definition of the activities covered by Directive 96/71 in order to identify easily and exclude those activities, which do not involve genuine, meaningful and effective posting.

3.5.1 CAPACITY TO ADDRESS LEGAL AND ADMINISTRATIVE PROBLEMS

Option 5 has a relevant capacity to address the ambiguities in the regulation of posting since it can directly modify the definitions included in the PWD.

This kind of intervention can significantly reduce the protectionist extension of national provisions by limiting the host MSs' discretion in imposing on posting firms the application of an overall or substantial part of their labour law system by simply justifying them as provisions of public policy.

Option 5 has a great capacity to address both the administrative barriers and the weakness of monitoring and enforcement of the PWD as illustrated in Option 3.

3.5.2 CAPACITY TO ADDRESS ECONOMIC ISSUES

The broad scope of the intervention, on the one hand addresses all the social issues related to posting, but on the other, introduces the important *caveat* of potentially exacerbating the trade-offs between the objective of the integration and development of the single market of services and the protection of workers. In particular, a new stricter regulatory setting can help to eliminate distortions and abuse, but at the same time it may produce barriers to the transnational provision of services and 'perverse' unexpected effects such as a shift of the firms which currently use posting to less protected forms of employment, like undeclared work. Moreover, even if new definitions may be less ambiguous than previous ones, a new regulatory setting always implies a certain degree of uncertainty, which increases transaction costs, as well as learning costs.

3.5.3 CAPACITY TO ADDRESS SOCIAL ISSUES

In a similar way, Option 5 can address social issues related to the protection of workers and industrial relations, especially because it implies a new balance between economic integration and social cohesion, with a stronger focus on formal worker protection. However, the higher constraints introduced can result in a net loss in the actual benefits which accrue to workers in the present situation. In particular, this is linked to the potential 'perverse effects' of stricter regulations, like the shift to undeclared work, and to reduced market integration, with negative impacts on job opportunities and economic growth. As a consequence, the actual contents must be selected carefully and the impact must be considered with great attention.

3.5.4 SUBSIDIARITY, PROPORTIONALITY, FEASIBILITY AND IMPLEMENTATION

The compliance with the subsidiarity principle depends on the specific contents of the revision. However, the intervention at EU-level complies with the above principle since the balance between the integration of the EU market and the protection of workers cannot be achieved by measures adopted at national level.

The respect of the principle of proportionality depends on the specific contents of the revision. Clearly a revision which disproportinately restricts the freedom of providing

services in relation to the gains in terms of social cohesion is incompatible with the EU Treaty.

Finally, the main problem related to this option is its political feasibility. The divergences among MSs on the balance between economic integration and social cohesion make the new consensus particularly difficult.

3.5.5 SELECTION OF CONTENTS ON THE BASIS OF EFFECTIVENESS, EFFICIENCY, AND CONSISTENCY WITH THE OBJECTIVES

Given the broad scope of interventions of Option 5 and the potential trade-offs that a substantial modification of the posting regulation may entail, the selection of the contents is particularly challenging. Each measure must be carefully considered in its consistency with the objectives of the legislative intervention.

As regards the modification of Art. 4-6, the interventions are the same as Options 3 and 4 (see letters a. to g. in the subsection above).

Concerning the revision of Art. 1-3, the following considerations must be taken into consideration:

- a. A clearer definition of the temporary nature of posting within the employment relationship between the posting firm and the posted worker is coherent with Policy option 5. This can be achieved by limiting or prohibiting repeated and rotational postings (van Hoek and Houwerzijl 2011, p. 57)
- b. The imposition of an employment relationship independent of the posting between the sending firm and the worker who is posted. Such employment relationship would in any case involve a genuine economic activity and an organic link with the posting firm and in particular must entail that the worker is expected to continue working with his employer after his return in the home State. This intervention veers towards the prohibition of 'letterbox' companies.
- c. As for the conditions applicable to posted workers, the new Directive provides that minimum pay of host MSs must be applied to posted workers only if set by law or by universally binding collective agreements. In fact, 'equal treatment' through other kinds of collective agreements ('generally applicable' in the geographical area and industry or 'signed by the most representative employers' and labour organisations at national level') cannot be achieved when the legal system of the host MS does not impose their application on all national firms.
- d. A new provision in the PWD specifically stating a common notion of minimum pay, by listing the elements to be included, would be in contrast with Art. 153.5 TFEU, which excludes pay from the competences of the EU. In fact, even though the policy option at stake does not prescribe a certain level of pay, it will, however, define the elements which constitute the notion of minimum pay (and, indirectly, of pay in general), thus interfering with the prerogatives of national legislators and social partners.

The new PWD includes an express clarification, according to ECJ case-law, that the notion of 'minimum rates of rates' is not equivalent to a 'minimum wage' according to the British tradition. Therefore, different rates of pay linked to skills, job classifications and seniority can be applied to posted workers too.

- e. The PWD reform introduce an explicit coordination with the ILO Convention n. 94 on Public Procurement by stating that host MSs can impose abidance with the conditions concerning minimum pay stated by collective agreements which are generally applicable in the geographical area and industry or concluded by most representative employers' and labour organizations at national level if this is a condition to participate in public tender for procurement, to conclude any other contract with public administration, to obtain normative, tax or contribution advantages. In these cases, in fact, equal treatment of posting and indigenous firms is guaranteed.
- f. With regard to the protectionist use of public policy provisions, the revised PWD introduces an express definition of the notion of public policy provision in the Directive, by listing a set of clear examples of employment conditions which are consistent with this notion according to the ECJ's jurisprudence, in particular *Commission v. Luxembourg* ruling.

3.5.6 NEW INFORMATION OBLIGATION AND REQUIRED ADMINISTRATIVE ACTIONS

As regards the modification of Art. 4-6, the new IOs and the required administrative actions involved by the policy option are the same as Options 3 and 4 (for provisons a. to c.).

Concerning the revision of Art. 1-3, it must be noted that, as in the case of Option 2, the new provisions (a. to f.) only concerns definitional aspects of posting without involving any measure able to determine new IOs and therefore new required administrative actions at EU level.

3.5.7 COMPLETENESS AND OVERALL CAPACITY TO ADDRESS THE PROBLEMS

As for Options 3 and 4, this Option permits a better implementation and application of the PWD. In fact, it increases MSs' capacity to detect and sanction distortions and abuse. Furthermore, it fully addresses the legal problems linked to the definition of posting, the applicability of collective agreements, and the definition of 'public policy provisions'. However, the achievement of these objectives must be carefully balanced in order to avoid restrictions in the transnational provision of services, excessive transaction and learning costs for the actors as well as unexpected perverse effects.

3.5.8 Type of intervention (Communication, Recommendation, Regulation, Directive)

This option can be carried out only by an amending Directive grounded on Articles 53 and 62 TFEU.

3.6 OPTION 6. "REPEAL DIRECTIVE 96/71/EC"

This option completely repeals the PWD and reinstates the pre-PWD situation, including the relevance of the ECJ case-law elaborated before the end of 1996. This does not reaffirm the 'Rush Portuguesa' doctrine, according to which MSs are completely free to decide to what extent their labor regulations have to be applied to posted workers, but revives the jurisprudence which immediately followed the 'Rush Portuguesa' case¹² (see ECJ rulings on cases Arblade¹³, Mazzoleni¹⁴, Finalarte¹⁵, Portugaia costrucoes¹⁶) and affirmed the principle that the application of the national law of the receiving MSs requires the extension of the test of necessity, proportionality and adequateness of the relevant national legislative provisions.

By completely repealing the PWD, Option 6 results in a situation where posting is regulated by the Rome I Regulation, which applies the legislation of the sending country, but allows receiving countries to impose the application of mandatory provisions. Of course, the compatibility of national rules with the EU legislation, and in particular, the Treaty provisions, will be defined through the ECJ jurisprudence.

3.6.1 CAPACITY TO ADDRESS LEGAL AND ADMINISTRATIVE PROBLEMS

This option does not solve effectively the legal-administrative problems related to the PWD. On the one hand, repealing the PWD would reinstate the situation of uncertainty which characterised the regulation of the posting of workers prior to the adoption of the PWD. Without the PWD, the selection of the law applicable to the terms and conditions of employment of posted workers would be exclusively regulated by the Rome I Regulation593/2008, which provides that, in the absence of an explicit choice by the contractual parties, the law of the place where the worker habitually carries out his job must be applied to his employment relationship even if he is temporarily sent abroad (Art. 8). According to Article 9 of this Regulation, the labor law of the receiving MS is applicable as 'mandatory rule' if it corresponds to 'public interest' and therefore cannot be derogated in that national legal order. As a consequence, this option does not solve the problems of the 'public policy provisions'. On the contrary, it would increase legal uncertainty, since the notion of 'mandatory rules' provided by Article 9 of the Rome I Convention is even more undefined than the notion of 'public policy provisions' included in Article 3.10 of the PWD.

3.6.2 CAPACITY TO ADDRESS ECONOMIC ISSUES

Due to the lack of a clear regulatory framework resulting from the repeal of the PWD, Option 6 has a low capacity to support the integration and development of the market of services. Similarly, the capacity to address issues relating to employment and the labour market is low.

¹² Rush Portuguesa, ECJ case C-1139/89, Judgement of 27 March 1990.

¹³Arblade, ECJ joined cases C-369/96 and 366/96, Judgement of 23 November 1999.

¹⁴Mazzoleni, ECJ case C-165/98, Judgement of 15 March 2001.

¹⁵Finalarte, ECJ joined cases C-49/98, 50/98, 52/98, 54/98, 68/98, 71/98, Judgement of 25 October 2001.

¹⁶Portugaia Construcoes Lda, ECJ case C-164/99, Judgement of 24 January 2002.

3.6.3 CAPACITY TO ADDRESS SOCIAL ISSUES

Policy option 6, by repealing the PWD and its nucleus of protections, has a low capacity to address social issues and can exacerbate social frictions related to abuse and distortions of posting.

3.6.4 SUBSIDIARITY, PROPORTIONALITY, FEASIBILITY AND IMPLEMENTATION

Since this option changes the EU selection criteria of the law applicable to the terms and conditions of employment of posted workers, it cannot be pursued by measures adopted at national level. Therefore it complies with the principle of subsidiarity.

In this case too, there are serious problems of political feasibility. Repealing the PWD would result in an increased scope for the application of the regulatory framework of sending countries, with a corresponding increase in the relevance of social issues in high labour cost countries form a receiving perspective. Therefore, a strong opposition of high labour cost MSs should be expected.

3.6.5 SELECTION OF CONTENTS ON THE BASIS OF EFFECTIVENESS, EFFICIENCY, AND CONSISTENCY WITH THE OBJECTIVES

As the option repeals the PWD, there is no possibility to choose its contents.

The resulting regulatory framework will be based on Rome I Regulation, the national provisions on mandatory rules, and the ECJ case-law. In particular, the principles of applying the rules of the sending countries as stipulated by the Rome I Regulation can be overcome only by overriding public policy provisions introduced by MSs. The admissibility of these provisions must respect the test of necessity, proportionality and adequateness, as defined by the ECJ jurisprudence.

In the absence of a precise legislative regulation of posting and of the conditions applicable to posted workers, the EU-wide definitions of 'temporariness' of both service and posting, and employment conditions, including minimum rates of pay, will be identified mainly through a case-by-case approach by the ECJ.

The repealing of the Directive does not address the current situation of broad and uncertain judge-made definitions (see Section 1 above for an in depth analysis of the ECJ's case-law). The resulting uncertainty is likely to increase administrative requirements and controls on posted workers at national level. The cooperation between MSs on posting will be based on bilateral or multilateral agreements.

3.6.6 NEW INFORMATION OBLIGATION AND REQUIRED ADMINISTRATIVE ACTIONS

Obviously, this option involves neither any new information obligation nor new specific administrative actions.

3.6.7 COMPLETENESS AND OVERALL CAPACITY TO ADDRESS THE PROBLEMS

The overall capacity of Policy option 6 to address the problems and issues is low. Indeed, it can produce additional ambiguities and uncertainties and create more scope for economic and social issues.

3.6.8 Type of intervention (Communication, Recommendation, Regulation, Directive)

This option can be implemented by adopting a repealing Directive grounded on Articles 53 and 62 TFEU.

4. ANALYSIS OF THE IMPACTS

4.1 METHODOLOGICAL APPROACH

This Section focuses on the legal/administrative, economic, and social impacts of each policy option which is assessed in terms of its impacts on benefits and costs for the actors. Since a full-fledged quantitative assessment of the impacts is not possible, due to the lack of data and the limited evidence at aggregate level, the evaluation is based on an analytical framework which looks at the different policy options and how they influence the drivers of posting and thereby modify the benefits and costs for actors, in order to identify the direction and the size of the changes caused by each intervention. Moreover, the additional administrative burdens imposed by each option are quantified.

Starting from the baseline scenario, the present Section includes a simulation of the prospective developments in posting to define a clear reference for the assessment of the Policy options.

The impact assessment of each policy option consists of six steps:

- 1) The assessment of the impact on legal and administrative issues.
- 2) The assessment of the impact on the economic issues
- 3) The assessment of the impact on social issues.
- 4) The assessment of the overall economic and social impacts with reference to the general objectives of the legislative interventions (for the objectives, see Section 2).
- 5) The identification of the variations in benefits and costs for actors compared to the baseline scenario.
- 6) The quantification of the administrative burdens implied by the new IOs imposed by the EU legislative provisions.

<u>Steps 1-5</u>

Based o

Based on the regulatory contents of each policy option, the impacts on the legal/administrative problems and on the economic and social issues are assessed considering the baseline scenario¹⁷ as the benchmark.

In particular, the assessment focuses on the influence of regulatory interventions on posting and its drivers in order to identify the direct and indirect impacts of the various policy options. While effects immediately resulting from changes in the regulation are considered direct effects, those not expected and not explicitly pursued by the changes in the regulation are considered indirect effects.

¹⁷The content of the Policy options has been selected through juridical case studies. Each case study has focused on one of the legal and administrative problems identified in Section 1, with a view to identify the measures which would allow to effectively address the relevant problem and meet at the same time the twin goals of fostering economic integration and strengthening social cohesion.

The impacts on problems and issues are assessed according to the following scheme:

Impact	Description of the impact compared to the baseline scenario
0	Negligible: When the overall impact on the issue or the problem is assessed as absent or very limited
+	<i>Positive</i> : When the overall impact on the issue or the problem improves the situation with positive effects for at least some of the actors involved
++	Strongly positive: When the overall impact on the issue or the problem remarkably improves the situation with positive effects for at least some of the actors involved
-	Negative: When the overall impact on the issue or the problem worsens the situation with negative effects for at least some of the actors involved
	Strongly negative: When the overall impact on the issue or the problem remarkably worsens the situation with negative effects for at least some of the actors involved

The impacts of the Policy options depend to a great extent on how they affect the costs and benefits of the actors involved and on how they help to tackle distortions and abuse without introducing new barriers to the transnational provision of services. Each policy option, by changing the regulatory arrangements, transforms the framework of incentives of the various actors involved in posting (MSs, firms, workers, trade unions) and their expected consequent behaviour. Therefore, the impacts of each policy option are assessed also in terms of changes in benefits and costs for actors. Impacts on benefits and costs for the actors are indicated analytically, in comparative terms with respect to the baseline scenario (See Table 1.4), taking into account:

- The aggregate level of receiving and sending MSs;
- o The micro level of workers and firms, both from sending and receiving perspective;
- o The institutional level of trade union representation.

The assessment considers the direct and indirect effects of the regulatory interventions included in the various policy options. Direct effects are those involving posted workers and posting firms. Indirect effects are those impacting on workers and firms in general, on markets, society at large, and MSs. For instance, workers and firms in sending countries benefit from more job and business opportunities (direct impact), and also from a general improvement in labour market conditions and the strengthening of the competition (indirect impact).

Step 6

As requested by the EC Impact Assessment Guidelines (2009, see Annex 10), the new administrative costs imposed by EU legislation revisions are assessed according to the EU Standard Cost Model (SCM). It must be underlined that such quantification focuses on the *additional administrative costs*— the costs incurred by public authorities, firms and citizens

(target groups) in meeting new information obligations – new IOs – implied by the Policy options.

Identifying new IOs and the required administrative actions consistent with the contents of each Policy option prompts a conservative approach, since in some cases the new IOs overlap with other existing IOs at EU level or replace prior obligations introduced at national level. The transnational enforcement of administrative sanctions which are currently not covered by the PWD, but can be enforced according to other EU rules, is an example of overlapping. On the other hand, measures which are not mandatory in the current PWD but have actually been implemented in some countries can be substituted (totally or partially) by the introduction of new IOs at EU level, as in the case of the notification systems on posting.

Once the costs related to the new IOs are calculated, in order to provide a more precise indication of additional administrative burdens, the current situation across EU (the baseline scenario) is considered. For instance, initially the costs related to the introduction of a prior-declaration system on posting (Policy options 3, 4, and 5) are calculate for all MSs, but existing notification systems are reported. Consequently, the EU-wide provisions in the new text of the PWD can in fact reduce administrative burdens in certain MSs since a 'light' common notification systems can reduce costs for companies if they replace burdensome national systems.

Cost calculation is based on evidence collected through case studies and national labour costs provided by the EUROSTAT Labour Cost Survey 2008 (NACE rev.2).

4.2 A MEDIUM-TERM PROJECTION OF THE BASELINE SCENARIO

Under the assumption that nothing changes in the regulatory framework both at EU and national level¹⁸, it is possible to use a simple model to simulate the expected evolution of posting in the medium term (5 years). The details of the model used for the simulation are provided in Annex B.

The main results of the simulation can be summarised as follows:

• Given the current regulatory setting, posting will increase following the economic cycle. As shown in Figure 4.1, posting continues to follow a cyclical pattern and keeps similar features in terms of level, drivers and structure. It must be noted that the U-shaped pattern of posting corresponds to the negative cycle in the period 2007-2009 and to the forecast of a phase of limited growth between 2010-2015. Overall, the present growth forecast implies that posting would increase by 12% in six years, slightly below the GDP growth.

aspects and the resulting increase in posting can be eventually considered as conservative (overestimation of the phenomenon).

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¹⁸On this assumption it must be noted that between 2007 and 2011 transitional measures concerning the free movement of workers residually operating in some MSs were repealed. However: 1) according to some authors (IDEA Consult and Ecorys 2011) no broad evidence concerning the impact of transitional measures for the free movement of workers on the number of postings emerges (with the exception of Romania). This indicate that posting is generally not used by New MSs as a substitute for the free movement of workers; 2) the repeal of the transitional measure on free the moment of workers excludes the attempt to circumvent such regulation as potential driver of posting. Therefore, posting can be simulated avoiding considering this

- The potential convergence of labour cost reduces the convenience of the posting of low skilled workers resulting in a smaller growth rate of posting. In case of labour cost convergence, the reduction in the role of differentials in labour cost as a driver of posting leads to an increase in the relative weigh of postings driven by skill and labour shortages, job opportunities, internationalisation and market integration. It must be noted that wage and labour cost convergence is not a consequence of posting. This trend is widely debated in the economic literature and is linked to a more general and widespread phenomenon of economic convergence across Europe supported by economic integration (see Annex B, Box B2).
- In both cases (with and without labour cost convergence), postings grows, but at a slow pace (slightly lower than GDP growth), and remains an economic phenomenon of limited significance at aggregate level.
- The country breakdown of the simulation shows that Germany, France, Poland, Portugal, Belgium and Luxembourg continue to be countries which send the most relevant number of postings and Germany, France, Belgium, Spain, Italy and the Netherland remain the most relevant recipient of postings (see Figure 4.2 and Table B.2).
- The simulation on the detailed country by country inflows-outflows (see Table B3 and Table B4) confirms that posting does not change substantially in terms of relative extent and features. Therefore, we can conclude that the limited critical issues related to the posting of workers continue to characterise a restricted number of high labour cost countries which receive a relatively high number of posted workers driven by the differences in labour cost. With converging labour cost, the relevance of these critical issues becomes even more limited.
- Results must be interpreted very cautiously because the simulation is based on a number of hypotheses (see Annex B). In particular, the extent of postings resulting from the model should be used to foresee a general trend of the phenomenon and not as a precise forecast of the future number of posted workers country by country. Finally, notice that the receiving perspective results in a prudential underestimation of the future extent of the phenomenon.

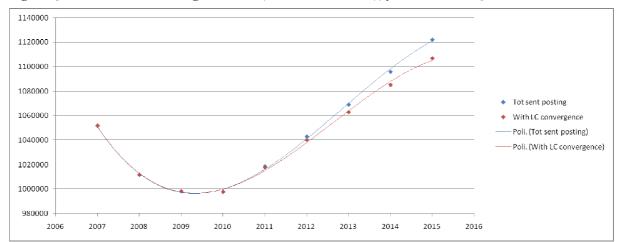
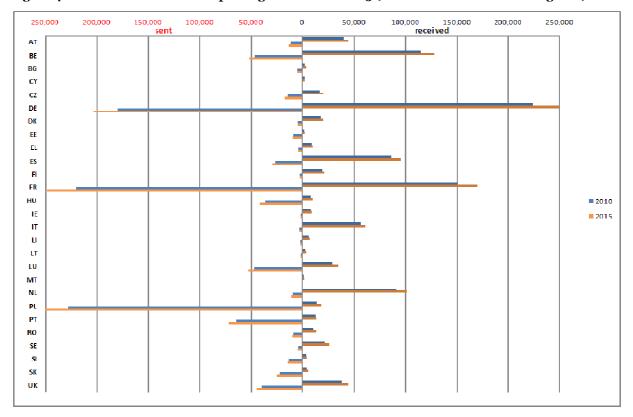


Figure 4.1. Simulation: Posting from EU27 received in EU 27, years 2010-2015





4.3 OPTION 1. NO FURTHER SPECIFIC ACTION

In case of no further specific action, no interventions are taken at EU-level. Therefore, the PWD remains in force and defines the general regulatory framework of posting. However, with respect to the baseline scenario, some measures can be taken at national level. In addition, learning-by-doing and trial-and-error processes, ECJ case-law and international cooperation contribute to partly clarify the current regulatory setting.

Table 4.1. The main impacts of Policy option 1

Problems and issues	Impact
Ambiguities in the definition of posting	О
Ambiguities in the identification of the conditions applicable to posted workers	0
Protectionist extension of national provisions	О
Administrative barriers	О
Weak monitoring and enforcement	0/+
Integration and development of the single market of services	О
Employment and labour market	0
Protection of worker rights	0/+
Industrial relations	0
Overall impact on market integration	0
Overall impact on social cohesion	0/+

4.3.1 LEGAL IMPACTS

Legal problems, without changes at EU-level, remain the same. However, adjustments can take place at national level (as it happened with the legislative amendments in Sweden and Denmark). This entails:

- Limited impacts in the field of **monitoring and enforcement**, which marginally improves through learning-by-doing and trial-and-error processes as well as by the progressive clarification of the regulatory framework through ECJ case-law.
- International cooperation can improve at the margins, as pressure emerges for a better enforcement of the PWD and the current bilateral and multilateral cooperation improves enforcement, although in a selective (only in the countries, areas, and sectors involved) and not in a generalised way.
- In the long run, the control and enforcement capacity of institutions in sending countries may also improve thanks to the support provided by EU bodies, bilateral and multilateral agreements, and by unilateral initiatives by receiving MSs, like in the case of the implementation of monitoring systems such as LIMOSA and RUT-Register.

4.3.2 ECONOMIC IMPACTS

The negligible adjustments in the regulatory framework due to learning mechanisms, essentially in the field of monitoring and enforcement, do not have relevant economic impacts:

- As shown in the simulation, the expected trend of posting basically follows the business cycle and geographical proximity continues to structure the distribution of flows.
- The extent and features of posting remain unchanged and its trend of moderate growth continues to be determined by the present drivers and mainly by the business cycle.
- In the long-run, the slow labour cost convergence reduces the component of posting driven by differentials in labour costs. This results in a greater relevance of posting driven by market integration, and skill and labour shortages.

4.3.3 SOCIAL IMPACTS

The marginal adjustments in the legal administrative domains illustrated above improve the protection of worker rights, but only marginally.

4.3.4 BENEFITS AND COSTS BY ACTORS

As a result of the negligible impacts describe above, benefits and costs related to posting for each actors will remain substantially unchanged. Only negligible reductions in costs emerge due to learning mechanisms, basically through a marginal improvement of monitoring and enforcement. The impacts by actors are detailed in the table below.

Table 4.2. Option 1: Benefits and costs by actors

Actors	Benefits	Costs
MS sending	Negligible reduction in social dumping	
MS receiving	Negligible reduction in conflicts between different groups of workers, and in institutional and legal disputes	
Firm sending		
Firm receiving	Negligible reduction in conflicts with local workers and trade unions, and in unfair competition	
Workers receiving	Negligible reduction in social dumping related to abuse and distortions	
Workers sending	Negligible reduction in exploitation related to abuse and distortions	
Trade unions sending		
Trade union receiving		

4.3.5 OVERALL IMPACT IN TERMS OF ECONOMIC INTEGRATION AND SOCIAL COHESION

The posting of workers continues to follow a cyclical pattern and keeps similar features in terms of levels, drivers and structure. The problems are not addressed and solved at systemic level, while adjustments at the margin can accommodate the most critical aspects to a limited extent, in particular in the field of monitoring and enforcement. Overall the impact compared to the baseline scenario is at most negligible.

4.3.6 ADMINISTRATIVE COSTS

No new IOs are envisaged.

4.3.7 POLITICAL FEASIBILITY

As the debate on posting at EU-level has focussed on the need for an improved regulation of the phenomenon, the political pressure to act is high. This Policy option does not affect the present balance between economic freedom and social cohesion included in the PWD and, in view of the divergent opinions on the possible regulatory changes, the maintenance of the current regulatory setting could represent a potential compromise. However, it is likely that some action, possibly limited to non-binding interventions like a Communication or a Recommendation, would in any case be a preferred choice.

4.4 OPTION 2. CLARIFICATION OF PRESENT LEGAL FRAMEWORK BY WAY OF A COMMUNICATION PLUS A RECOMMENDATION

This option does not modify any part of the text of the PWD. It introduces non-binding clarifications of Art. 4 and 5 of the PWD with the objective to improve information, enforcement and cooperation at MS level by means of a Communication reinforced by a Recommendation.

In particular, the Communication and the Recommendation cover:

- a. Admissible systems of notification of posting.
- b. Inspections at national level.
- c. Non-discriminatory administrative requirements.
- d. Measures to provide information on the regulation of posting.
- e. Information on the minimum rate of pay which must be applied to posted workers.
- f. Clarification of the scope of public policy provisions.

Table 4.3. The main impacts of Policy option 2

Problems and issues	Impact
Ambiguities in the definition of posting	0/+
Ambiguities in the identification of the conditions applicable to posted workers	0/+
Protectionist extension of national provisions	0
Administrative barriers	0/+
Weak monitoring and enforcement	0/+
Integration and development of the single market of services	0
Employment and labour market	0
Protection of worker rights	0/+
Industrial relations	0
Overall impact on market integration	0/+
Overall impact on social cohesion	0/+

4.4.1 LEGAL IMPACTS

Impact on ambiguities in the definition of posting

The legal impact of policy option 2 is trivial, since a Communication and even a
Recommendation by the Commission are able neither to solve nor to significantly reduce
the uncertainties imbued in the case-by-case application of the formula elaborated by the
ECJ for identifying the temporary nature of a service activity and of the posting of
workers.

Impact on the ambiguities of the conditions applicable to posted workers

• Bearing in mind that Communications and Recommendations are not able to produce binding obligations, this option can have a weak impact on reducing the ambiguities of the identification of the conditions applicable to posted workers.

Impact on protectionist extension of national provisions

- A clarification by way of a Communication or a Recommendation is not able to give an effective contribution to overcome or solve such difficulties.
- Without the adoption of binding measures, MSs continue to apply their internal laws to
 undertakings established in other MSs. In order to effectively clarify the meaning of
 "public policy" going beyond the present legal framework it is necessary to introduce
 clearer and binding rules.

Impact on administrative barriers

Articles 4 and 5 of the PWD leave MSs a broad, almost indefinite, discretion in the way of implementing their obligations, since they do not establish any controls on compliance, nor specify the forms of administrative cooperation to be implemented, nor introduce mandatory sanctions for national authorities which do not meet requests for cooperation by authorities of other MSs or do not provide information on the terms and conditions of employment applicable to posted workers.

• Policy option 2 has a limited impact on administrative barriers since, as already illustrated, it cannot achieve further results than those of the Communications COM (2006) 159 and COM (2007) 304 on the admissible controls that the authorities in receiving MSs can apply, and of the Commission guidelines on best practices for cooperation among MSs. In fact, neither the content nor the form of the new interventions would change substantially.

Impact on weak monitoring and enforcement

Option 2 reiterates the indications and exhortations of Communications COM (2006) 159 and COM (2007) 304, and of the Recommendation of 31 March 2008on the actions and measures that MSs should implement to increase enforcement of the PWD obligations and enhance transnational administrative cooperation¹⁹.

• No increased effectiveness can be expected due to the lack of binding measures apart from the learning effects already described for Option 1.

¹⁹Recommendation of 31 March 2008 on enhanced administrative cooperation in the context of the posting of workers in the framework of the provision of services has strongly exhorted MSs to take the necessary measures and make the required efforts to:

put in place an electronic information exchange system, such as the Internal Market Information System ('IMI');

increase their efforts to enhance access to the information on the terms and conditions of employment that must be applied by service providers;

ensure that their liaison offices are in a position to carry out their tasks effectively,

participate actively in a systematic and formal process of identification and exchange of good practice in the field of
posting of workers through any forums of cooperation established by the Commission to that end, such as the envisaged
High-Level Committee.

4.4.2 ECONOMIC IMPACTS

Impact on the integration and development of the market of services

- This option does not imply any further barrier to the transnational provision of services.
- By clarifying and improving information and cooperation between MSs, this policy option
 may reduce the regulatory uncertainties and therefore potentially favour posting and the
 transnational provision of services. However, because the regulation of posting does not
 substantially change and no binding or enforceable obligations are imposed on MSs, the
 phenomenon of posting in terms of extent and features is expected to remain unchanged.
- The extent and features of posting remain unchanged and its trend of moderate growth continues to be determined by the present drivers and mainly by the business cycle.
- The overall effect on single market and competition at EU level is assessed to be limited or negligible compared to the baseline scenario.

Impact on employment and labour market

• This option does not imply any relevant impact on employment and the labour market. Like in the current regulatory setting, posting continues to represent both a source of job opportunities for posted workers and a solution for labour and skills/specialisation shortage for firms.

4.4.3 SOCIAL IMPACTS

Impact on the protection workers' rights

Although the aim of this policy option is clarifying the PWD and favouring its enforcement, the effectiveness of this policy option in promoting cooperation and enforcement is limited because of the absence of binding measures for MSs. Therefore, with respect to the baseline scenario:

- This option only negligibly reduces distortions and abuse in the posting of workers and increases the protection of posted workers' rights to a similar marginal extent.
- The potential reduction of distortions and abuse in posting and the improvement in the
 protection of posted workers' rights may help to reduce social tensions around posting.
 However, the capacity to achieve these results is frustrated by the absence of any binding
 measures and sanctions to ensure the full compliance of the MSs with the clarifications.

Impact on industrial relations

This option clearly cannot tackle the controversies on the role of trade unions and
industrial relations in influencing the working and employment conditions of the posted
workers. Therefore, in comparison with the baseline scenario, this policy option does not
imply any impact.

4.4.4 BENEFITS AND COSTS BY ACTORS

Further efforts in a non-binding clarification of the PWD result in the negligible impacts described above. Weak reductions in costs can emerge due to voluntary compliance and

learning mechanisms, as in Option 1. Some additional negligible benefits in terms of market integration are achieved through marginal improvement in the regulatory framework.

Table 4.4. Option 2: Benefits and costs by actors

Actors	Benefits	Costs
MS sending	Negligible increase in market integration Negligible reduction in social dumping	Negligible costs related to abidance with the Communication and the Recommendation
MS receiving	Negligible increase in market integration Negligible reduction in conflicts between different groups of workers, and in institutional and legal disputes	Negligible costs related to abidance with the Communication and the Recommendation
Firm sending		
Firm receiving	Negligible reduction in conflicts with local workers and trade unions, and in unfair competition	
Workers receiving	Negligible reduction in social dumping related to abuse and distortions	
Workers sending	Negligible reduction in exploitation related to abuse and distortions	
Trade unions sending		
Trade union receiving		

4.4.5 OVERALL IMPACTS IN TERMS OF ECONOMIC INTEGRATION AND SOCIAL COHESION

The overall impact of Option 2 to achieve the general objectives of strengthening the supportive framework for the transnational provision of services and ensuring a conducive environment for social cohesion is limited in comparison with the baseline scenario. In particular, the policy option may diminish the barriers to the development of the transnational provision of services and the room for opportunistic and illicit behaviour.

However, the policy option cannot condition directly and effectively the MSs' application of the PWD and bind national authorities to implement administrative controls and cooperation. For this reason, the policy option 2 only negligibly improves the enforcement mechanisms and international administrative cooperation across MSs and does not achieve to a significant extent other relevant operational objectives such as the resolution of the controversies typically related to the posting of workers; the introduction of provisions to support the effective protection of the rights of posted workers; and the specification of administrative cooperation obligations for MSs, with relevant and effective sanctions in case of non-compliance.

4.4.6 ADMINISTRATIVE COSTS

There are no additional costs resulting from this option, since there are no significant changes with respect to the present situation and no new IOs are involved by the option.

However, in comparison with Option 1, Option 2 entails some additional costs for EU institutions connected to the process of defining and issuing the Communication and the Recommendation.

4.4.7 POLITICAL FEASIBILITY

This policy option is easily feasible because it does not need an EU Council or an EU Parliament vote and does not seem to pose any particular problems for MSs both from a sending and a receiving perspective since it maintains the present balance of interests established by Art. 3.1.

The case studies underline that employers' organisations appreciate this policy option, as it entails no additional costs for firms and does not introduce stricter rules on posting. Trade unions, instead, question the effectiveness of this policy option in improving the working conditions of posted workers and in reducing the risks of social dumping.

4.5 OPTION 3. A PARTIAL REVIEW OF DIRECTIVE 96/71, AMENDING ONLY ARTICLES 4–6 OF THE CURRENT DIRECTIVE - IMPROVING APPLICATION, COMPLIANCE AND ENFORCEMENT IN PRACTICE

This option partially modifies the PWD by amending articles 4, 5 and 6, with the aim to improve the application of the Directive while preserving the present balance of interests established by articles 3.1. This option improves application, compliance and enforcement by a broad and detailed system of administrative cooperation, a set of obligations and sanctions, and an information exchange system.

The modifications of the regulatory framework include:

- a. The obligation for MS to set up a comprehensive system to inform posting companies about conditions applicable to posted workers.
- b. A joint liability on the side of the receiving company in fulfilling the obligation to respect the host MS minimum rates of pay.
- c. The obligation for MSs to join a common EU-wide system of ex-ante declaration of posting, reinforced by a joint liability on the side of the receiving company.
- d. An obligation to keep at the workplace of the posted workers in the host MS only for the time of the service a copy of documents deemed essential to prove the terms and conditions of employment of posted workers.
- e. Administrative sanctions applicable at transnational level.
- f. The obligation to grant to trade unions in host MSs the right to denounce and to act before the courts to obtain the application of sanctions.
- g. The establishment of an administrative Commission at EU level to promote the exchange of experiences and best administrative practices.

Table 4.5. The main impacts of policy option 3

Problems and issues	Impact
Ambiguities in the definition of posting	+
Ambiguities in the identification of the conditions applicable to posted workers	+
Protectionist extension of national provisions	0/+
Administrative barriers	++
Weak monitoring and enforcement	++
Integration and development of the single market of services	+
Employment and labour market	0/+
Protection of worker rights	++
Industrial relations	+
Overall impact on market integration	+
Overall impact on social cohesion	++

4.5.1 LEGAL IMPACTS

Impact on ambiguities in the definition of posting

- This option has a positive impact on the ambiguities in the definition of posting since the
 introduction of a binding measure concerning an *ex ante* system of notification allows to
 indirectly specify the temporariness of services through the indication of the start and of
 the foreseeable end of the service.
- The introduction of a reinforced obligation to notify the relevant authorities if the foreseeable period of service exceeds 24 months helps to reduce ambiguities and favour monitoring concerning the temporary nature of posting.

Impact on the ambiguities of the conditions applicable to posted workers

- Policy option 3 has a positive impact on the ambiguities of the condition applicable to
 posted workers since amendments of art. 4 and 5 PWD include obligations for MSs to
 adopt an adequate information system to inform posting companies about terms
 applicable to posted workers.
- With the obligation of MSs to state which is the minimum rate of pay that shall apply to
 posted workers in each branch covered by the national legislation implementing the PWD
 in a precise and accessible way, Option 3 has a relevant impact in terms of enhancement
 of the information and increased capacity to control the respect of the rules on the
 minimum rates of pay.
- The accessibility and clearness of information concerning the conditions applicable to
 posted workers help to reduce uncertainty for firms and therefore diminishes
 organisational costs and risks related to the use of posting. For the MSs, there are new
 'light and sustainable' obligations.
- The introduction of an ex ante system of communication of the hourly pay applied to posted workers and the weekly working hours as well as the obligation of keeping a copy of documents proving the pay effectively applied to posted workers as a binding measures of the PWD can reduce ambiguities and facilitate the administrative controls on the respect of the fulfilment of obligations provided by Art. 3.1.

Impact on protectionist extension of national provisions

• The positive impact of Policy option 3 on the protectionist extension of national provision is weak or negligible, since no binding measures are introduced on this aspect. In fact, Option 3 reduces the scope for abuse and distortions through improvements in the implementation and enforcement of the PWD. This can partly discourage the utilisation of the 'public policy provisions' as a means to tighten the regulatory framework in order to protect domestic actors.

Impact on administrative barriers

 Option 3 has a strong positive impact on the problem of the presence of unnecessary or not legitimate administrative burdens. • The provision of an on line system of declaration and the obligation of keeping in the host MS only a limited number documents, excluding conversely all forms of prior authorisation or registration and controls, ensure the introduction of only clear and minimum requirements, which are deemed absolutely necessary to check the phenomenon of posting.

Impact on weak monitoring and enforcement

- Option 3 has a strong positive impact on the problem of weak monitoring and enforcement of the PWD. In fact, the provision of a mandatory on line notification system and the obligation of keeping a limited number of essential documents significantly strengthen the capacity of labour inspectorates to enforce the fulfilment of PWD obligations and to cooperate with each other.
- The introduction of a binding cross-national system of sanctions in case of noncompliance with the monitoring system effectively contributes to dissuade undertakings to violate PWD obligations.
- Joint liability for the submission of the declaration strengthens the compliance with the duty of notification, as the notification system becomes 'self-enforceable'.
- Option 3 implies additional positive impacts on enforcement by including the obligation for MSs to grant trade unions in receiving MSs the right to denounce illicit practices and to act before the courts to ask for the application of sanctions.

4.5.2 ECONOMIC IMPACTS

Impact on the integration and development of the market of services

This policy option introduces a number of new provisions aimed at implementing cooperation and enforcement, including sanctions for non-compliance. The option requires careful consideration in order not to produce barriers to the transnational provision of services:

- The selected content of the policy option set up controls and sanctions which are effective enough to eliminate or significantly reduce distortions and abuse without unnecessarily increasing operational and administrative costs related to the posting of workers.
- The provisions on cooperation, ex ante notification and administrative controls, without introducing forms of ex ante authorisation, do not represent regulatory barriers able to discourage genuine posting (see the Annex C on LIMOSA and RUT-Register).
- Costs of cooperation and enforcement for MSs and firms increase in comparison with the
 baseline scenario. However, the experiences of LIMOSA in Belgium and of RUT-Register
 in Denmark show that 'light' systems of notification, monitoring and administrative
 cooperation do not discourage the use of posting within the transnational provision of
 services. For a detailed quantification of the administrative costs associated to this Policy
 option see the specific subsection below and Annex D.

- Enforcement mechanisms such as joint and several liability of the posting and utilising companies in case of breach of workers' rights do not discourage genuine posting. The experience of Germany with joint liability supports this idea.
- The policy option increases cooperation and access to information on the terms and conditions of employment, thereby favouring a 'soft' harmonisation at EU-level. The resulting greater regulatory certainty facilitates posting and the transnational provision of services.
- The reduction of abuse and distortions resulting from a more effective enforcement of the PWD reduces the room for unfair competition associated to the misuse of posted workers in receiving countries.
- This policy option can increase genuine posting with positive effects on the single market of services both for receiving and sending countries and consequently on the full exploitation of posting as a means to facilitate efficient labour force allocation, competiveness and economic development.
- Overall, the impact of Policy option 3 on the integration and development of the single market of services is positive.

Impact on employment and labour market

Option 3 implies relevant changes in the "quality" of posting by favouring the use of genuine posting and reducing abuse and distortions. This:

- Positively affects the labour market conditions by promoting regular working and employment conditions.
- Reduces the pressure on employment and working conditions in receiving countries.
- Increases the quality of skills involved in posting and improves the full exploitation of posting to fill specialisation shortages.

4.5.3 SOCIAL IMPACTS

Impact on the protection of workers' rights

- This option effectively helps to eliminate distortions and abuse in the posting of workers and increases the protection of posted workers' rights thanks the introduction of a set of binding and enforceable measures and information exchange tools.
- The reduction of abuse partially reduces the room for disputes related to posting.
- The protection of local workers benefits of spill-over effects of the better enforcement of posted workers' rights.

Impact on industrial relations

This option does not directly address the controversial effects of posting on collective bargaining and industrial relations, but:

Social conflicts which characterise high labour cost countries from a receiving perspective
are reduced through the elimination of distortions and abuse in posting and the
improvement in the protection of posted workers' rights

• The provision granting the right to denounce and to act before the courts to trade unions improves the role of trade unions in enforcing the PWD.

4.5.4 BENEFITS AND COSTS BY ACTORS

As a result of the relevant impacts describe above, benefits and costs related to posting for each actors will substantially change. The impacts by actors are detailed in the table below.

Table 4.6. Option 3: Benefits and costs by actors

Actors	Benefits	Costs
MS sending	Increase in market integration (thanks to increased legal certainty) Increase in social and economic integration Relevant reduction in social dumping	Increase in costs of monitoring and enforcement related to the PWD
MS receiving	Increase in market integration (thanks to increased legal certainty) Increase in social and economic integration Reduction in conflicts between different groups of workers, and in institutional and legal disputes	Increase in costs of monitoring and enforcement related to the PWD
Firm sending	Increased business development and entry market (thanks to reduction in uncertainty) Reduction in organisational costs thanks to the increased information	Increase in administrative and compliance costs
Firm receiving	Increased efficiency (through reduction in skill/specialisation shortages) Reduction in conflicts with local workers and trade unions, and in unfair competition Reduction in organisational thanks to the increased information Reduction in unfair competition related to abuse and distortions	Increase in administrative and compliance costs
Workers receiving	Relevant reduction in social dumping related to abuse and distortions. Consequently, reduction in job displacement and downward wage pressures related to social dumping	
Workers sending	Relevant reduction in exploitation related to abuse and distortions Reduction in mobility costs	
Trade unions sending		
Trade union receiving	Greater involvement in representation of posted workers Reduction in weakening of trade union role	

4.5.5 OVERALL IMPACTS IN TERMS OF ECONOMIC INTEGRATION AND SOCIAL COHESION

The impact of Option 3 on the general objectives of strengthening the supportive framework for the transnational provision of services and ensuring an environment conducive to social cohesion with respect to the baseline scenario is strongly positive.

Although the policy option implies the introduction of cooperation and enforcement measures which impose additional cooperation and enforcement costs related to the posting of workers both to the MSs and firms, the option does not imply relevant barriers to the development of the transnational provision of services. Rather, the increased regulatory certainty and cooperation among MSs results in a further reduction of barriers to the transnational provision of services, with positive effects in terms of the development of the single market.

Furthermore, a better specification of the administrative cooperation obligations for MSs, with sanctions in case of non-compliance, and the development of cooperation and enforcement mechanisms can effectively reduce the room for opportunistic and illicit behaviour and circumventions of rules which characterise the current baseline scenario. This directly and significantly improves the protection of posted workers' rights as well as it reduces the scope of social dumping. As for trade unions, the inclusion of a right of acting before the court to both denounce violations and obtain the application of sanctions could strengthen the role of trade unions in the application of the PWD.

Overall, Policy option 3 has a positive impact on market integration and a strongly positive impact on social cohesion.

4.5.6 ADMINISTRATIVE COSTS

The administrative and the compliance costs linked to the new provisions included in Policy option 3 are described in Table 4.7. Administrative and compliance costs are calculated according to the SCM and are described in detail below. The parameters for the calculation of costs have been derived from the information provided through the case studies and specific investigations. The case studies provided information relevant to the estimation of the costs of the system of prior-declaration of posting and joint liability. When case studies present diverging information, a conservative value has been chosen, in order not to underestimate the administrative costs involved by IOs and compliance costs. Annex D provides the detailed Reporting Sheet.

Specifications of the administrative cost evaluation:

a. Comprehensive system to inform posting companies:

- Costs linked to the preparation of the information to be included in the leaflet (item 1) is calculated considering 10 working days of a PA employee as the average time necessary to produce information material on posting. The evaluation follows the EU Standard Cost Model (SCM).
- Costs linked to the translation of the information (item 2) is calculated considering the number of keystrokes (characters + spaces) in the Belgian information website multiplied by the average European tariff per keystroke usually applied to professional translations of legal texts (for 4 languages). The Belgian information web site was selected as the benchmark since it is regarded as best practice in communication on posting (Muller 2011) and therefore it can be regarded as a reference also for the preparation of the leaflet. Therefore, this standard reflects a conservative approach.

The translation cost has been based on a review of a number of internet based translation services (Ismeri Europa). Both parameters (keystrokes and translation rates) have been increased by 20-40% to adopt a conservative approach.

Table 4.7 Administrative and compliance costs implied by option 3, per required action

iı	New provision nvolving IOs or ompliance costs	Required action	Target group	Tariff per unit of time/ action, Time/units of actions	Freq.	Tot. costs (details in Annex D)
a.	Information	1. The preparation of the information to be included in the leaflet	PA	10 working days at LC for PA	One-off	EUR 44,355 EUR 0.044 per posting
about the conditions applicable to the posted		2. Translation of the information	PA	Translation service cost per keystroke - 4 languages	One-off	EUR 324,000 EUR 0.325 per posting
	workers	3. Printing of the leaflet	PA	Printing service: cost per 10,000 leaflets	Repe- titive	EUR 139,000 per year EUR 0.14 per posting
b.	Joint liability of RF for minimum rate of pay	Contractors monitors minimum pay application by subcontractor	RF	15 minutes per posting at LC for business support activities	Repe- titive	EUR 5.7 mill. per year EUR 5.69 per posting
		1. Set up of the monitoring system	PA	EUR 48 per posting	One-off	EUR 48 mill.
		2. Operation of the monitoring system (Fixed costs: personnel and maintenance)	PA	5 full time workers at LC for PA	Repe- titive	EUR 4.9 mill. per year EUR 4.89 per posting
c.	System of prior declaration of posting	3. Operation of the monitoring system (variable costs)	PA	5 minutes per posting at LC for PA	Repe- titive	EUR 2.4 mill. per year EUR 2.37 per posting
	reinforced by joint liability on RF.	4. Information campaign on the monitoring system	PA	EUR 0.30 per posting	Perio- dical	EUR 0.3 mill. (periodical)
		5. Notification of posting	SF	15 per posting at LC for business consultants	Repe- titive	EUR 8 mill. per year EUR 7.99 per posting
		6. Contractors monitors the fulfilment of the declaration duty of the subcontractor	RF	15 minutes per posting at LC for business support activities	Repe- titive	EUR 5.7 mill. per year EUR 5.69 per posting

- Costs linked to the printing of the leaflet (item 3) is calculated considering three colours, double sided leaflet, on gloss paper. Printing costs have been based on a review of a number of internet based printing services (Ismeri Europa). The cost has been increased by 40% to take a conservative approach. This is calculated at EUR 1,400 per 10,000 leaflets.
- Actions are scaled to the number of (received) postings. This amount is given by the simulation for 2010 (Ismeri Europa).

• In practice, given the existing obligations illustrated in Section 3, the one-off costs of translation should be considered partially.

b. Joint-liability related to the minimum rates of pay:

• New possible compliance costs are a combination of selection and monitoring costs, respectively linked to stricter selection criteria, which require more time-spending selection processes, as well as monitoring activities. However, since the obligation to pay minimum wages is already included in the present PWD, we must assume that the new regulation only entails to make explicit a current implicit constraint (for instance, we should not expect higher direct service costs, since we have to assume that subcontractors already pay the required minimum rates of pay). The result would be that higher selection costs are marginal (contractors need to implicitly include a selection criteria about payment of minimum rates of pay to posted workers which is implicitly already present). Therefore, only new monitoring costs must be calculated. According to our estimation, the time needed to monitor the application of the rules on minimum rates of pay by subcontractors is the same as that needed to submit relevant information on the terms of employment of the posted workers in the framework of the notification system. Indeed, this is a conservative estimation since notification includes more details than the applied rates of pay, which is the only relevant piece of information in this case. Therefore, the compliance costs for receiving firms can be calculated as fifteen minutes per posting. The number of (received) postings is given by the simulation for 2010 (Ismeri Europa).

c. Prior declaration reinforced by joint liability of receiving firms:

- The costs connected with the setting-up of the monitoring system (item 1) are estimated on the basis of the case studies of LIMOSA and RUT-Register (Ismeri Europa) as EUR 48 per (received) posting. This calculation is based on the costs of set-up reported by the two systems weighted by the received postings (in 2010).
- The estimation of the operational fixed-costs of the monitoring system (item 2) is based on the case studies of LIMOSA and RUT-Register (Ismeri Europa); five people working full time on the system within the public administration.
- The costs connected with the operational variable of the monitoring system (item 3) are estimated on the basis of the case studies of LIMOSA and RUT-Register (Ismeri Europa); five minutes on average devoted to each (received) posting by a public administration employee. This is the average time of the assistance provided to user firms. The estimation is conservative since only a minority of firms requires assistance.
- The costs of the information campaign on the monitoring system (item 4) are based on the case studies of LIMOSA and RUT-Register (Ismeri Europa); EUR 0.30 per (received) posting. This is a calculation based on the total costs of information campaigns divided by the number of received postings, as recorded by the notification system.

- The notification of posting (item 5) is based on the case studies of LIMOSA and RUT-Register (Ismeri Europa); 15 minutes on average per (sent) posting by a business consultant.
- The evaluation of the administrative costs for receiving firms related to their joint-liability for the fulfilment of the declaration obligation (item 6) is based on the time needed to monitor the correctness of the declaration and its effective submission to the system. It can be estimated as equivalent to the submission of relevant information to the notification system. Therefore, the administrative cost can be calculated by considering fifteen minutes per received posting. This estimation is conservative.
- The number of postings (received or sent, depending on the item) is given by the simulation for 2010 (Ismeri Europa).
- In terms of actual administrative costs, we should consider that notification systems are already in place in a number of countries:
 - o For an on line system, the set-up costs in Belgium and Denmark should be disregarded for public authorities and for firms.
 - If the prior declaration system is envisaged but does not require on line set-up, the costs related to a notification systems should be disregarded for other MSs like France and Germany.
 - On line system should not be considered an obstacle in terms of limited accessibility to web-based systems by companies, especially SMEs. The two case studies show that on-line systems significantly improve the rate of compliance. Paper notifications (by mail or fax) cannot be excluded completely, as an alternative way of compliance, since limited access to internet must be taken into account. However, the Belgian case study shows that this form of submission is marginal (less than 100 notifications out of a total of more than 250,000).
 - The costs linked to the set up and operation of the notification system is kept to a minimum since only the minimum information needed for effective monitoring is included in the description of the possible system.
 - The establishment of a common EU reference framework for notification systems entails lower transaction and learning costs for companies involved in the notification system and greatly improves the comparability of data on posting within the EU, thereby enhancing the capacity to monitor the phenomenon and guide sound policy-making both at national and EU levels on posting.

Overall costs:

Overall the above mentioned provisions entail the following costs for the different target groups:

- Considering all items, the total initial administrative and compliance costs linked to the provisions are EUR 75.25 million, or EUR 75.4 per posting. One-off costs amount to EUR 48.25 million (EUR 48.37 per posting) and repetitive/periodical costs amount to EUR 27.0 million per year (EUR 27 per posting, per year).
- If we consider administrative and compliance costs per posting, this amounts to much less than one working day at the average labour costs for the service sector in EU 27.
- As illustrated above, most of the provisions included in the policy option do not seem to entail additional costs.

		One-off		Repetitive/p (per year)	eriodical
Target group	Provisions	Total	Per posting	Total	Per posting
PA	a. Information	368,355	0.37	139,662	0.14
(receiving)	c. Prior notification systems	47,884,058	48	7,541,162	7.5
Firms	b. Joint liability for minimum pay			5,673,573	5.7
(receiving)	c. Prior notification system (joint liability)			5,673,573	5.7
Firms (sending)	c. Prior notification systems			7,969,176	8.0
Total		48,252,413	48.37	26,997,146	27,0

- Estimation must be treated carefully as evidence from case studies is usually based on rough indications made by stakeholders and experts. However, the conservative approach used makes them a fair approximation of expected expenses. In general, a variability range of +/-10% of the estimated costs should be considered as a further precaution.
- As explained in Section 4.2, the future extent of posting is simulated on the basis of the E101 data which do not perfectly reflect the number of posted workers, and some underreporting is likely. This could entail an underestimation of expenses directly linked to the number of postings. However, in case of underestimation, the cost per posting of one-off administrative costs would be reduced. Given the level of costs entailed in the provisions under examination, such differences can be considered as marginal. In addition the general estimation approach has been conservative by including administrative and compliance costs which are in large part already covered by actors, since they are imposed by national legislations or other existing EU provisions.

Concluding, this policy option increases the responsibility of MSs to set up systems of cooperation, information, control and enforcement ensuring the 'right balance' between an effective protection of posted workers and the free provision of services. As requested by the ECJ rulings, the measures respect the principle of proportionality and allow detecting and sanctioning distortions and abuse without imposing any limitations on posting by high administrative and compliance costs.

Although this option increases the administrative costs related to enforcement for MSs and firms, the administrative burdens are limited. The increases in cooperation and enforcement costs are limited by the utilisation of information and communication technologies, which enable the development of effective and low-cost systems of electronic notification, monitoring and administrative cooperation among MSs. The LIMOSA experience in Belgium and the RUT-Register in Denmark (see Annex C) are interesting 'pilot' experiences in this respect. According to the two case studies, the implementation of the monitoring tools did not affect the underlying drivers and features of posting, with no depressive effect on the phenomenon, improved the overall enforceability of the regulatory setting and helped reduce at least some forms of abuse and distortions.

4.5.7 POLITICAL FEASIBILITY

Articles 53 and 62 TFUE provide the appropriate legal base for introducing the amendments to Articles 4-6 of the current Directive. The current legal base of Directive 96/71 also legitimises partial reform interventions and amendments with the objective of enhancing the social protection of posted employees. According to such legal base, the ordinary (codecision) legislative procedure with qualified majority voting within the Council applies. Given the co-essential transnational dimension of the regulatory issue at stake here, such legislative proposal complies with the requirements of the subsidiarity principle.

The compatibility with the EU legal system and the technical feasibility are strong. However, the implementation of this option has a low political feasibility. In fact, the possibility that the scope of the revision is extended beyond the modification of Art- 4-6 in the Council to include the more politically sensitive provisions of Art. 1-3, can lead to a political deadlock due to the divergences across MSs.

The case studies show a general appreciation of this Policy options by social partners and stakeholders. Employers are particularly in favour of this kind of intervention, because it does not change the balance of interest included in Art. 3.1 of the Directive. Trade unions maintain that an improvement in implementation and enforcement is crucial. Public authorities are also in favour in strengthening enforcement and international cooperation. However, should the debate within the Council extend to Art. 1-3, remarkable differences in the position of the two sides of industry would emerge. Therefore, the support of this Policy option greatly depends on the effective focus of interventions only on Art. 4-6.

4.6 OPTION 4. A SEPARATE, NEW LEGISLATIVE INITIATIVE ENHANCING THE APPLICATION AND ENFORCEMENT IN PRACTICE OF DIRECTIVE 96/71/EC

The aims and the measures of Option 4 are exactly the same as those of Option 3. The regulatory contents of the two options are the same. The essential difference between the two policy options is the type of intervention. The possibility of changing the legal base and extend it to Art. 153 TFEU, which is allowed by the adoption of a new directive, has no impact on the scope of the content of the option, insofar as this reform is limited to the enforcement measures now regulated by Art. 4-6.

As a consequence, all the considerations in the previous section concerning the impacts on the legal-administrative problems and on the economic and social issues are the same. The observations provided above in terms of administrative costs can be extended in full to the assessment of Policy option 4.

The overall impact of Option 4 on the general objectives of strengthening the supportive framework for the transnational provision of services and ensuring an environment conducive to social cohesion is strongly positively. Policy option 4 can be distingushed from Option 3 (and preferred to the latter) on the basis of its feasibility (see below) rather than because of any different legal, economic and social impacts.

Table 4.8. The main impacts of Policy option 4

Problems and issues	Impact
Ambiguities in the definition of posting	+
Ambiguities in the identification of the conditions applicable to posted workers	+
Protectionist extension of national provisions	0/+
Administrative barriers	++
Weak monitoring and enforcement	++
Integration and development of the single market of services	+
Employment and labour market	0/+
Protection of worker rights	++
Industrial relations	+
Overall impact on market integration	+
Overall impact on social cohesion	++

4.6.1 POLITICAL FEASIBILITY

The essential difference between Options 3 and 4 refers to the political feasibility of this option. Adopting a new act would limit the debate within the Council to the conditions of application and enforcement of the PWD (Articles 4, 5 and 6), preventing a possibile discussion of other parts of the PWD. Therefore, it seems to be politically more feasible than option 3.

4.7 OPTION 5. A WIDE-RANGING REVIEW OF DIRECTIVE 96/71

This option both modifies the rules of implementation and enforcement of the PWD (Art. 4-6). It also changes the other parts of the Directive, in particular Art. 1-3 concerning the scope (Art. 1), the definition (Art.2) and the terms and conditions of employment (Art. 3) of posting.

As regards the modification of Art. 4-6, the interventions are the same of Options 3 and 4 (letters a. to g.).

Concerning the revision of Art. 1-3, Option 5 concerns:

- a. The limitation and prohibition of repeated and rotational postings
- b. The imposition of the existence of an employment relationship independent of the posting between the sending firm and the worker who is posted, which entails that the worker is expected to continue working with his employer after his return in the home State. This clarifies the prohibition of 'letterbox' companies and implies a 'light' definition of the temporariness of posting, without indicating an express maximum duration.
- c. The provision that minimum pay of host MSs must be applied to posted workers only if set by law or by universally binding collective agreements.
- d. An express clarification that the notion of 'minimum pay of rates' can include pay systems based on skill, job classifications and seniority.
- e. The provision that host MSs can impose abidance with the conditions concerning minimum pay stated by collective agreements which are generally applicable in the geographical area and industry or concluded by most representative employers' and labour organizations at national level if this is a condition to participate to public tender for procurement, to conclude any other contract with public administration, to obtain normative, tax or contribution advantages.
- f. The introduction of a common notion of public policy provision in the directive, listing a series of clear examples of employment conditions responding to this notion.

Table 4.9. The main impacts of policy option 5

Problems and issues	Impact
Ambiguities in the definition of posting	++
Ambiguities in the identification of the conditions applicable to posted workers	+
Protectionist extension of national provisions	+
Administrative barriers	++
Weak monitoring and enforcement	++
Integration and development of the single market of services	-/+
Employment and labour market	0/+
Protection of worker rights	+
Industrial relations	++
Overall impact on market integration	-/+
Overall impact on social cohesion	+

4.7.1 LEGAL IMPACTS

Impact on ambiguities in the definition of posting

Option 5 has a positive impact on the ambiguities in the definition of posting, since it
introduces the limitation and prohibition of repeated and rotational postings and it
imposes the existence of an employment relationship independent of the posting between
the sending firm and the worker.

Impact on the ambiguities of the conditions applicable to posted workers

Option 5 reduces the ambiguities in the conditions applicable to posted workers as it:

- Clarifies that only universally binding collective agreements can set the minimum rates of pay as for Art. 3.1 PWD and that articulated systems of minimum pay are admissible.
- Indicates that generally applicable collective agreements and those signed by most representative organisations can be applied in a promotional perspective (in public procurement or in access to subsidies and incentives) when the same obligation applies to domestic firms.

Impact on protectionist extension of national provisions

The overall impact of Policy option 5 largely depends on the scope of the matters expressly included in such list. If the potential recourse to the 'public policy provisions' clause is kept to a minimum, thereby reflecting an 'international' common definition of public policy provisions, the potential for market integration will be strengthened. If the scope of public policy provisions is broaden to encompass most or even all of the national labour regulation, a significant part of the potential of posting to foster the integration of the market of services will be lost. Therefore, the first option is preferable:

• Option 5 has a positive impact in clarifying the extension of national provisions further than matters provided by article 3.1 of the PWD, since it introduces an express list of topics responding to public policy provisions and defines the criteria that can be used to identify them in national legal systems. In this way, it limits the possibility to extend arbitrarily the application of national labour regulation and reduces regulatory uncertainty and variability across MSs, with benefits for firms in terms of lower transaction costs as well as for MSs in terms of better enforcement of the PWD.

Impact on administrative barriers

• Option 5 has the same impact on administrative barriers as Options 3 and 4, since it similarly limits the administrative requirements for firms thanks to improved monitoring, cooperation and enforcement.

Impact on weak monitoring and enforcement

• The strongly positive impact of this policy option on the stakeholders would be substantially the same of the Policy options 3 and 4.

Impact on the integration and development of the market of services

Policy option 5 introduces a wide range of new provisions aimed at both implementing cooperation and enforcement and modifying Articles 1–3. Therefore the option requires a very careful consideration in order to take into account the possible barriers to the transnational provision of services and potential 'perverse' effects which exacerbate the trade-offs between economic integration and social cohesion:

- Concerning the revisions aimed at improving application, enforcement and coordination,
 the same conclusions apply as for Option 3 and 4. In particular, the controls and
 sanctions significantly reduce distortions and abuse without excessive costs and
 administrative burdens for firms and MSs and do not represent a regulatory barrier able
 to discourage genuine posting.
- The reduction in abuse and distortions resulting from a more effective enforcement of the PWD limits the room for unfair competition associated to the misuse of posted workers in receiving countries.
- The requirement of an employment relationship independent of the posting helps to prevent the phenomenon of 'letterbox companies' and implies a 'light' definition of the temporariness of posting, without indicating an express maximum duration. This kind of indirect qualification of the temporary nature of posting is better than an explicit and strict regulation of the duration of posting, which would unnecessarily constrain genuine posting and hamper the integration of the EU market of services. However, from an economic perspective, even this 'light' requirement unnecessarily constrains firms which perform genuine posting and need to hire additional workers for temporary services. Furthermore, this further requirement introduces new transaction costs, since firms face interpretative uncertainty concerning the admissible forms of posting. Increased constraints and transaction costs reduce posting and the integration of the market of services.
- The clarifications concerning the minimum rates of pay allow to reduce ambiguities and related transaction costs and do not represent a limit to the transnational provision of services. From this perspective, it is important to underline that establishing a principle of 'equal pay for equal work' between domestic and posted workers, besides being technically difficult to implement, from the economic point of view, would result in a remarkable reduction of the potential of the transnational provision of services by eliminating one of the main drivers of posting (the reduction in labour cost) and therefore should not be introduced.
- A narrow definition of 'public policy provisions' helps to sustain the growth of posting and the transnational provision of services and the economic integration of the EU.
- The revision of Article 1-3 reduces ambiguities and the protectionist extension of national provisions. However, compared to Option 3 and 4, new constraints in the use of posting and emerging transaction costs can offset and even reverse such positive impacts. Therefore the overall impact on economic integration is ambiguous.

Impact on employment and labour market

- As for Option 3 and 4, a more effective cooperation and enforcement can imply relevant changes in the 'quality' of posting by favouring the use of genuine posting and eliminating abuse and distortions. This can positively affects the labour market by promoting regular working and employment conditions.
- Although a new definition of Articles 1-3 helps to eliminate distortions and abuse, at the same time it results in 'perverse' unintentional effects. In particular a stricter regulation of posting, which constrains firms that currently use genuine posting, may induce them to shift to less protected forms of employment, like undeclared work.

4.7.2 SOCIAL IMPACTS

Impact on the protection of workers' rights

- To the same extent as Option 3 and 4, this option effectively helps to eliminate distortions and abuse in the posting of workers and increases the protection of posted workers' rights thanks to the introduction of a set of binding and enforceable measures and information exchange tools.
- Other revisions of the directive aimed at improving the formal protection of posted workers' rights might result in obstacles or unnecessary burdens for firms and therefore imply unexpected effects. In particular, provision concerning the requirement of an employment relationship independent of the posting between the posting workers and the posting firms, in some cases, induces firms which currently use posting to shift to less protected forms of employment, like undeclared work. This has negative impacts not only for posted workers but also for local workers because enlargement of less protected or irregular forms of employment can imply a general worsening of the working and employment conditions.

Impacts on industrial relations

 Besides the positive impacts already described for Policy options 3 and 4, Policy option 5, by directly addressing the issue of the applicability of collective agreements in a promotional perspective, help to tackle the social issues regarding the role of trade unions and industrial relations in regulating working and employment conditions of posted workers.

4.7.3 BENEFITS AND COSTS BY ACTORS

As a result of the relevant impacts describe above, benefits and costs related to posting for each actors will substantially change. The impacts by actors are detailed in the table below.

Table 4.10. Option 5: Benefits and costs by actors

Actors	Benefits	Costs
MS sending	Increase/Decrease in market integration Relevant reduction in social dumping	Increase/Decrease in market integration Increase in costs of monitoring and enforcement related to the PWD
MS receiving	Increase/Decrease in market integration Reduction in conflicts between different groups of workers, and in institutional and legal disputes	Increase/Decrease in market integration Increase in costs of monitoring and enforcement related to the PWD
Firm sending	Increase/Decrease in business development and entry market Reduction in organisational thanks to the increased information	Increase in administrative, and compliance costs Increase/Decrease in business development and entry market
Firm receiving	Increased efficiency (through reduction in skill/specialisation shortages) Reduction in conflicts with local workers and trade unions, and in unfair competition Reduction in organisational costs thanks to increased information Reduction in unfair competition related to abuse and distortions	Reduced efficiency (through greater constraints on posting) Increase in administrative, and compliance costs
Workers receiving	Relevant reduction in social dumping related to abuse and distortions Reduction in job displacement and downward wage pressures related to social dumping	Increase in less regulated forms of employment (like undeclared work) due to higher constraints
Workers sending	Relevant reduction in exploitation related to abuse and distortions Reduction in mobility costs	Increase in less regulated forms of employment (like undeclared work) due to higher constraints
Trade unions sending		
Trade union receiving	Greater involvement in representation of posted workers Reduction in weakening of trade union role	

4.7.4 OVERALL IMPACTS IN TERMS OF ECONOMIC INTEGRATION AND SOCIAL COHESION

Option 5 has an ambiguous impact on the general objective of strengthening the supportive framework for the transnational provision of services and a positive impact on the general objective of ensuring an environment conducive to social cohesion.

The introduction of cooperation and enforcement measures, as for Option 3 and 4, which impose additional but limited costs on the MSs and firms, does not imply relevant barriers to the development of the transnational provision of services. Rather, the increased certainty in the application of the rules results in a further reduction of barriers to the transnational provision of services with positive effects in terms of the development of single market. Furthermore, effective cooperation and enforcement reduces the room for distortions and abuse.

The revision of Articles 1-3 introduces clarifications on key elements of the PWD, but it also entails binding constraints and 'perverse' incentives able to discouraging genuine posting.

This hampers the transnational provision of services and probably exacerbates social dumping through a sort of substitution effect of posting in favour to other less protected forms of employment. The overall impact is ambiguous.

Finally, a wide-ranging legislative review opens the door to regulatory uncertainty, to potential unexpected difficulties in application and harmonisation and to learning costs for MSs and firms which will face a modified normative context.

4.7.5 ADMINISTRATIVE COSTS

As explained in Section 3, the new IOs and the required administrative actions involved by the modification of Art. 4-6 are the same as Options 3 and 4. Therefore, Option 5 results in new administrative costs for PA and firms as the same for Option 3 and 4.

Concerning the revision of Art. 1-3, the new provisions only concern definitional aspects of posting without involving any measure able to determine new administrative costs imposed by EU legislation.

Besides the administrative costs, Option 5 entails higher transaction costs for firms, due to stronger constraints and increasing regulatory uncertainty.

4.7.6 POLITICAL FEASIBILITY

The political feasibility of this option is low. Option 5 directly calls into question the substantive balance of interests incorporated in Art. 3 PWD. Since the MSs have very different positions on the modification of the PWD, a new agreement on different terms seems rather difficult to reach.

Also the social partners have shown very different positions about the overall revision of PWD. Indeed, employers are clearly against a re-opening of the PWD, which they believe is working well. According to employers, interventions should focus on implementation and enforcement, in order to improve compliance with rule and avoid violations. Trade unions, instead, back a revision of the PWD, because they think this is the only possibility to redress what they see as a prevalent role of economic freedoms as opposed to social protection. However, trade unions usually demand amendments which have been explicitly excluded from the policy contents because of their negative impact on posting, like the establishment of the principle of 'equal pay for equal work' between posted and indigenous workers. Public authorities think that efforts should be applied to improve enforcement, while the political debate remains polarised.

4.8 OPTION 6. "REPEAL DIRECTIVE 96/71/EC"

This option completely repeals the PWD and reinstates the pre-PWD situation leading to the applicability of the principles of the Rome I Regulation, as interpreted by the ECJ jurisprudence which requires the test of necessity, proportionality and adequateness of the national legislative provisions to be extended to posted workers.

Table 4.11. The main impacts of policy option 6

Problems and issues	Impact
Ambiguities in the definition of posting	-
Ambiguities in the identification of the conditions applicable to posted workers	-
Protectionist extension of national provisions	-
Administrative barriers	-
Weak monitoring and enforcement	-
Integration and development of the single market of services	
Employment and labour market	
Protection of worker rights	
Industrial relations	
Overall impact on market integration	
Overall impact on social cohesion	

4.8.1 LEGAL IMPACTS

Impact on ambiguities in the definition of posting

 The repeal of the PWD produces a more ambiguous regulatory context than the present one, since all the actors involved are affected by the high degree of legal and interpretative uncertainty that characterises posting and the qualification as posted workers.

Impact on the ambiguities of the conditions applicable to posted workers

- Option 6 implies a case by case definition of the conditions applicable to posted workers.
 This surely increases regulatory uncertainty. Given that the mandatory obligations imposed by the PWD first of all those concerning the nucleus of provisions included in Art. 3.1 lose their mandatory character and become a possibility, the regulatory framework concerning the conditions applicable to posted workers is more ambiguous.
- The conditions applicable to posted workers are in principle those of the sending MS, unless application of the labour law of the receiving country is justified by public policy provisions or public interest reasons. MSs can continue to extend domestic rules to foreign service providers and some of them would resort to apply national labour legislation or collective labour agreements relating to minimum wages to EU service providers as measures of public policy (overriding public interest).

• Increased ambiguity and variability concerning working and employment conditions applicable to posted workers broaden the scope for discretionary behaviour.

Impact on protectionist extension of national provisions

Option 6 has a negative impact on the protectionist extension of national provisions. The
legal uncertainty on the possibility to apply the host MS labour law to posted workers will
increase and MSs will be tempted to apply their labour law by invoking public policy
necessity without the identification of any previous general balance which instead the
present PWD provides.

Impact on administrative barriers

- This option negatively impacts the problem of the identification of the legitimate
 administrative burdens related to posting, since rules on admissible controls and
 requirements lack completely and controls are deemed compatible with EU law only on a
 case-by-case basis, if the ECJ considers them able to pass the tests of necessity,
 appropriateness and proportionality.
- This will create a context of extreme uncertainty for all the actors concerning procedures and requirements to post workers abroad.

Impact on weak monitoring and enforcement

• The PWD repeal can produce a strong negative impact in terms of the capacity of MSs to enforce labour law rules and to cooperate fruitfully with each other. In fact, cooperation between MSs is governed only by bilateral or multilateral agreements, with no common framework and without binding rules. Consequently problems of detection and enforcement against abuse and distortions (no longer of the PWD but still involving posted workers) remain unresolved and probably worsen.

4.8.2 ECONOMIC IMPACTS

Impact on the integration and development of the market of services

- This policy option introduces relevant obstacles to posting and the transnational provision of services and to the development of the EU single market.
- Although coordination and enforcement related to the implementation of the current PWD are costly, in a scenario without the PWD, these costs are to be replaced by very high transaction costs related to regulatory uncertainty, lack of information on applicable working and employment conditions, and legislative frictions between national regulations in sending and receiving countries20.
- This option would be able to significantly hinder genuine posting with its related advantages in terms of matching labour and skills shortages, market integration and

²⁰ Good regulatory systems can effectively widen the market not only by reducing competition barriers, but also by reducing transaction costs, and increasing transparency cooperation and mutual trust. On the contrary, the lack of an effective regulatory framework is the reason for the emergence of incomplete markets, which fail to provide goods or services, even though the cost of providing it is less than what individuals are willing to pay (Stiglitz 1988).

- gains in competiveness, without leading to any advantage in terms of reduction of abuse and distortions.
- Although distortions and illicit behaviour related to the PWD are eliminated by definition, the repeal of the Directive leads to new forms of distortions and abuse which can be more pervasive since the new regulatory setting is more controversial and uncertain and overall weak.
- The repeal of legislation could seem a typical means to reduce regulatory barriers to favour the free transnational provision of services, but in fact it increases transaction costs due to regulatory uncertainty, social tensions and industrial relations problems and will most likely fail to foster market integration.

Impact on employment and labour market

- The option reduces both the posting of workers and the protection of posted workers, thereby curtailing job opportunities for posted workers and creating more room for abuse.
- A context less favourable to market integration and transnational provision of services results in less business opportunities for firms, slower economic development and, at the end, in a weaker employment creation process.

4.8.3 SOCIAL IMPACTS

Impacts on the protection of workers' rights

This option leads to a regulatory environment which reduces the protection of workers:

- The repeal of the Directive eliminates the regulatory framework, the set of basic protections, and enforcement mechanisms provided by the PWD which presently benefit posted workers.
- Unskilled workers from low labour cost countries could be even excluded from postings, if the receiving country imposes particularly burdensome and binding local working and employment conditions.
- Local workers do not benefit from such an uncertain regulatory framework, with a wide room for abuse, distortions, and social conflicts related to the posting of workers. In fact, since posting - also without the PWD - remains a necessity for firms entering new markets and providing transnational services, pressures on their employment and working conditions can increase.

Impact on industrial relations

- The general reduction in protection levels resulting from the application of the law of the place where the posted workers habitually work, without the enforceability of the core minimum standards of the receiving country, increases the scope for disputes concerning the applicability of the national law as well as the social tensions in industrial relations.
- The repeal of the directive does not allow addressing the question of the role of trade unions and industrial relations in the regulation of employment and working conditions

of posted workers. Actually, while the current regulatory setting recognises a role to collective bargaining (although criticised and debatable), the repeal of the directive would add further uncertainty to the scope of the role of trade unions and industrial relations concerning the posting of workers.

4.8.4 BENEFITS AND COSTS BY ACTORS

As a result of the relevant negative impacts describe above, benefits and costs related to posting for each actors will substantially change. The impacts by actors are detailed in the table below.

Table 4.12. Option 6: Benefits and costs by actors

Actors	Benefits	Costs
		Social dumping in case of postings Increased transaction costs related to bilateral
		agreements and cooperation related to forms of posting
MS sending		Reduced economic growth and job creation (through reduced market integration)
		Reduced upgrading of skills and know-how
		Reduced social and economic integration
		Increased institutional and legal disputes because of the regulatory uncertainty
		Increased transaction costs related to bilateral agreements and cooperation related to forms of posting
MS receiving		Reduced economic growth and job creation (through reduced market integration)
		Reduced competitiveness (because posting is discouraged)
		Reduced social and economic integration
T. 1		Increased organisational and administrative costs related to posting because of the uncertainty
Firm sending		Reduced business development
		Less entry market
		Increased organisational and administrative costs related to posting because of the uncertainty Conflicts with local workers and trade unions
Firm receiving		Unfair competition related posting
		Less efficiency and competitiveness (because posting is discouraged)
Workers		Increased social dumping related to abuse and distortions
receiving		Less job creation
		Higher mobility costs (monetary and non-monetary)
Workers sending		Low opportunities of employment, upward of working conditions and of skills and know-how
Trade unions sending		Less spill-over on trade union membership and practices
Trade union		Further weakening of trade union role
receiving		Reduced extension to posted workers of union representation

4.8.5 OVERALL IMPACTS IN TERMS OF ECONOMIC INTEGRATION AND SOCIAL COHESION

The overall impact of Option 6 on the general objectives of strengthening the supportive framework for the transnational provision of services and ensuring an environment conducive to social cohesion must be negatively assessed.

In particular, the repeal of the PWD and the consequent regulatory uncertainty impose additional relevant transaction costs related to posting on the MSs and the firms. This hinders the posting of workers and creates a relevant barrier to the development of the transnational provision of services with negative effects in terms of the development of the single market. Furthermore, a weaker basis for cooperation and enforcement of regulations at EU-level can increase the room for distortions and abuse and related social frictions. The option implies high uncertainty over the regulatory framework, with depressive effects on posting and a lower protection of posted workers, which is likely to increase social tensions. Both economic integration and social cohesion are negatively affected by this option.

4.8.6 ADMINISTRATIVE COSTS

By definition, Option 6 does not impose additional administrative costs both for firms and PA. However, the repeal of the Directive does not seem to determine any significant reduction in the administrative costs currently imposed by the PWD on PA and firms.

At national level, for MSs, costs of cooperation and enforcement increase, as the regulatory framework becomes more uncertain and more efforts are needed to identify the applicable solutions at different cases.

Beside the administrative costs, high transaction costs emerge for posting workers abroad due to regulatory uncertainty, lack of information on applicable working and employment conditions and legislative frictions between national regulations in sending and receiving countries. These are in part 'learning costs', which firms have to bear because of the new regulatory environment.

4.8.7 POLITICAL FEASIBILITY

The political feasibility of this option is low. It is not probable that MSs abandon the actual balance set by PWD to leave the posting substantially governed by ECJ case law only, increasing remarkably the degree of legal uncertainty and transaction costs for their firms.

5. COMPARING THE OPTIONS

The Policy options represent advanced regulatory solutions. They address many problems and issues related to the posting of workers with significant direct and indirect impacts. However, some of the problems are only partially addressed, as their solution might involve significant negative trade-offs. As underlined before, if regulation of posting is not properly balanced, it may actually emphasise the potential trade-offs between economic integration and social cohesion. The balance between these two objectives cannot be a purely technical solution, since it is the outcome of a political process aimed at identifying the equilibrium between two potentially conflicting goals. This analytical study provides relevant and crucial inputs to help identify the potential trade-offs and guide the decision-making process.

In order to compare the Policy options, the assessments described in Section 4 are summarised in terms of the 'overall impact' of each Policy option. This includes the impacts of interventions on the three policy domains (legal and administrative, economic, and social). Finally the 'overall assessment' of the Policy option considers technical and political feasibility, new administrative costs imposed by the options, and other costs for the actors, like transaction and learning costs.

Table 5.1 shows the outcome of the comparative analysis of the Policy options:

- The overall impact of Policy option 6 is clearly negative, as the uncertainty produced by repealing the PWD increases legal and administrative problems and has negative impacts on the economic and social dimensions.
- Option 5 has an overall unpredictable impact because of the restrictive effects on
 economic activities of the regulations introduced to address the legal problems. Even the
 least restrictive measures produce new limitations to posting, which may negatively affect
 the integration of the market of services and push firms to utilise less regulated and
 protected employment relationships.
- Options 3 and 4 have identical regulatory contents and therefore produce the same impacts. Although they involve new IOs and therefore new administrative costs for actors, such costs are limited (Section 4 and Annex D) and are counterbalanced by the benefits accruing to actors in terms of reduced transaction costs and improvements in monitoring and enforcement. As a result, the overall impact is strongly positive.
- Options 1 and 2 represent two slightly different forms of maintaining the current situation. Their weak positive overall impact is due to national marginal adaptive measures and learning processes, including international cooperation, which slightly improve monitoring and enforcement. Option 2 includes the reiteration of EU-level initiatives to streamline the national initiatives and support cooperation, without introducing binding measures; similar initiatives in the past did not achieve significant results.

Table 5.1. Comparative analysis of the Policy options

Impacts, feasibility and costs	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
Impact on legal problems	0/+	0/+	++	++	++	-
Impact on economic issues	0	0	+	+	-/+	
Impact on social issues	0/+	0/+	++	++	+	
Impact on market integration	0	0/+	+	+	-/+	
Impact on social cohesion	0/+	0/+	++	++	+	
Overall impact	Weakly positive	Weakly positive	Strongly positive	Strongly positive	Unpredict- able	Strongly negative
Technical feasibility	High	High	Medium	Medium	Medium	Medium
Political Feasibility	Low	High	Low	High	Low	Low
Administrative costs	0	o	Overall EUR 77 per posting	Overall EUR 77 per posting	Overall EUR 77 per posting	О
Transaction and learning costs	None	Low	Lower	Lower	High	High
Overall assessment	Weakly positive	Weakly positive	Positive	Strongly positive	Negative	Strongly negative

Further elements for the comparison of the Policy options can be drawn from their political feasibility and the monetary and non-monetary costs implied by their adoption and implementation:

- The high transaction and learning costs and the low political feasibility attached to Policy options 5 and 6 further reduce their attractiveness. In addition, it should be kept in mind that Policy option 5 entails the same new administrative costs as Policy options 3 and 4.
- The minimal costs of implementing Policy option 2 reduce the overall benefits of this solution compared to Policy option 1, which has no implementation costs. Conversely, high stakeholder pressure to act reduces the political viability of Option 1, because it does not involve any interventions at EU-level.
- Finally, the low political feasibility of Policy option 3, assuming that the discussion within the Council includes the provisions of Art.1-3 PWD, reduces the practical viability of this alternative.

These conclusions are also supported by the experienced-based assessment of stakeholders (public authorities, trade unionists, employer association representatives) who were interviewed for the case studies. Although the complexity and the diversified content of the various policy options made the identification of clear positions on specific contents difficult, the general assessment has emerged quite clearly. In general, there is a widespread dissatisfaction with the implementation and enforcement of the PWD and the need for action emerged as a common element across cases and stakeholders with varying degrees of urgency and different focus. The only notable exception is the UK where trade unions demand a change in the rules of posting —with an important focus on national-level regulation — while employers, especially the Confederation of British Industry, are satisfied with both the content and the implementation of the PWD. Moreover, the UK government is concerned

that new regulation could introduce further red-tape for companies. Despite the common demands for intervention, stakeholders maintain that any new measures must be carefully considered, in order not to 'worsen' the present balance of interest. While this position was generally voiced by employer representatives, notably out of fear of new restrictions and administrative burdens, in some cases, the union shared this attitude (see Denmark), based on a completely different motivation i.e. that the new intervention – including the right to strike – may reduce worker protection and create further challenges for the autonomous Danish system of labour regulation.

Focusing on the content of the policy options, trade union representatives were more in favour of substantial interventions, also in the areas covered by Art. 1-3 PWD. However, increased enforcement of the PWD was quite a general request. The employer representatives specified that costs and barriers to transnational service provision should be kept as low as possible and trade unionists added that enforcement should be accompanied by enhanced protection for workers.

In sum, while Policy options 1 to 4 seem to offer some scope for tackling the problems and issues related to the posting of workers, although to a different extent and with distinct costs and degrees of feasibility, Policy option 5 and 6 do not represent viable solutions.

In particular, Policy option 6 involves a significant worsening of the present situation in all dimensions, low political feasibility and high transaction costs, so that it can be discarded as a potential choice. By including the measures of Policy options 3 and 4, Option 5 determines the same impacts on implementation and enforcement. However, its distinctive interventions on Art. 1-3 PWD introduce limits to posting, high transaction costs and potential adverse effects, which make the assessment of the overall impact unpredictable. In addition, given the existing divergences over the actual content of the revision of Art. 1-3 PWD, the comparatively low political feasibility of Option 5 makes the other Policy options more attractive.

While Policy options 1 and 2 seem to offer limited prospects of effectively addressing the issues and problems raised by posting, Policy Options 3 and 4 appear the most attractive. Even if they entail new administrative costs, these are sufficiently low to be more than counterbalanced by the expected gains in terms of enforcement as well as by the positive impacts on economic integration and social cohesion. The higher political feasibility of Policy option 4 makes it the stronger candidate for action.

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Preparatory study for an Impact Assessment concerning the possible revision of the legislative framework on the posting of workers in the context of the provision of services

FINAL REPORT - ANNEXES

MARCH 2012



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ANNEX A - STATISTICAL AND ECONOMETRIC ANALYSES

Data and Statistics on E101

Table A1. Number of postings (E101) from and to EU27 and EFTA countries

		Postings	by sending	country		Postin	gs from EU	27/EFTA to 1	eceiving cou	ıntry
Country	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
AT	11,146	10,563	12,978	16,177	18,757	32,475	30,517	39,142	37,417	44,806
BE	:	51,889	46,212	51,173	50,774	123,080	127,627	112,766	109,000	95,589
BG	:	:	4,743	3,817	4,366	:	:	2,800	3,877	5,096
CY	292	584	143	76	29	3,591	3,300	2,368	2,048	1,524
CZ	14,303	22,354	15,803	16,383	17,150	:	:	16,647	15,985	12,756
DE	169,627	194,013	192,093	164,466	170,345	13,967	14,893	216,911	227,961	221,222
DK	11,872	11,188	7,071	7,920	7,063	12,281	17,609	17,666	15,031	10,928
EE	5,894	7,955	9,454	10,140	8,384	3,536	3,181	2,059	1,767	1,225
EL	1,099	958	3,179	2,717	2,265	11,151	9,683	9,652	9,247	10,489
ES	:	:	26,885	32,318	34,349	65,145	60,445	86,426	55,217	63,390
FI	5,452	4,579	2,451	5,599	4,929	13,340	16,088	18,760	10,941	16,920
FR	311,875	254,321	232,102	206,439	160,774	77,291	127,806	148,610	153,488	155,601
HU	23,795	21,131	36,178	43,204	36,403	8,271	8,512	8,264	9,009	7,438
IE	:	1,707	1,074	1,222	1,941	8,818	7,554	7,753	6,010	5,357
IT	:	1,542	3,320	24,451	29,955	50,236	46,063	55,688	50,730	50,365
LT	2,641	2,729	2,743	4,482	5,486	3,415	4,066	5,905	3,003	1,655
LU	29,065	38,005	46,827	57,264	57,276	30,242	42,537	27,969	26,718	25,042
LV	3,900	2,329	2,277	1,289	1,971	3,332	3,128	3,003	1,679	1,921
MT	:	133	101	162	112	3,017	2,750	1,634	1,628	2,976
NL	37,096	36,166	9,437	9,366	9,924	55,205	80,416	88,656	84,486	81,852
PL	136,368	195,206	238,946	228,722	204,374	13,506	13,142	14,512	13,996	14,704
PT	36,519	26,333	66,001	19,188	65,012	10,572	9,420	12,579	12,831	13,028
RO	:	:	9,030	13,096	26,116	:	:	10,752	11,781	9,320
SE	8,998	9,529	5,171	2,571	5,503	21,019	21,519	20,626	20,926	20,792
SI	3,067	9,333	13,032	17,162	17,835	4,645	4,317	3,802	3,375	2,969
SK	5,471	13,093	21,213	35,693	24,688	7,648	6,686	4,417	6,162	7,193
UK	38,906	40,679	43,251	36,436	32,284	38,909	36,961	37,905	37,733	34,760
СН	:	6,717	10,496	10,751	10,990	27,779	25,875	29,243	38,618	51,987
IS	146	184	67	110	123	3,035	2,898	2,245	1,136	699
LI	24	16	39	36	64	2,063	1,291	812	871	833
NO	1,158	1,101	1,065	1,251	1,291	22,953	34,307	33,828	23,731	21,603
Total	858,714	964,337	1,063,382	1,023,681	1,010,533	670,522	762,591	1,043,400	996,402	994,040
EU-15	661,655	681,472	698,052	637,307	651,151	563,731	649,138	901,109	857,736	850,141
EU-12	195,731	274,847	353,663	374,226	346,914	50,961	49,082	76,163	74,310	68,777
EFTA	1,328	8,018	11,667	12,148	12,468	55,830	64,371	66,128	64,356	75,122

SOURCE: EC Reports (2009 and 2011), elaborated by Ismeri Europa.

Annual data are not perfectly comparable because EC criteria of data collection were modified in 2007.

Note that "Postings" refers to the number of E101 certificates issued for "posting according to Art. 14(1)(a), 14a(1)(A), 14b(1),14b(2), Council reg. 1408/71, sent to EU 27 or EFTA Countries.

Differences in Total-sent and Total-received are due to the fact that in receiving countries postings are often not recorded.

Sending countries, where the certificates are issued, better reflect the number of postings.

Data for 2005 do not include postings from BE, BG, CZ, IE, ES, IT, LV, MT, RO, and CH.

Data for 2006 do not include postings from BG, ES, RO and CH.

Data for 2007, do not include postings from RO and CH, as both countries do not provide data.

Figures for posting originating in the UK relate, for 2007 data to April 2007 to March 2008, for 2008 data to April 2008 to March 2009 and for 2009 data to April 2009 to March 2010.

Figures for Germany relate, for 2008 data to 1 Jan. 2008 to 30 Nov. 2008 and for 2009 data to 1 Jan. 2009 to 30 Nov. 2009

Figures for Portugal in 2008 are underestimated since only 6 of the 18 district centres of social security provided the data.

Figures for Sweden in 2008 are underestimated since they cover only the last six months of the year.

For posting originated in Italy, the 2007 figures were underestimated as they covered only the last months of the year (the electronic processing of E1010 started in the second part of 2007)

Table A2. Posting (E101 certificates) country by country 2007 (number of cases)

TO.	FROM*	8																											\Box	\neg
то	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HU	ΙE	IT	LT	LU	LV	MT	NL	PL	PT	SE	SI	SK	UK	IS	LI	NO 7	Total
AT		298	47	2	644	22,000	155	9	7	149	45	4,496	2,604	7	60	8	474	6	0	182	3,676	848	44	1,230	938	1,177	0	26	10	39,142
BE	338		432	1	658	24,746	64	94	102	1,206	137	42,129	1,720	81	144	30	7,891	50	1	3,217	19,127	5,781	220	1,667	1,422	1,443	5	0	60	112,766
BG	43	73		0	521	417	41	4	14	78	27	1,259	14	0	7	0	3	0	0	43	62	0	59	11	0	113	0	0	11	2,800
CY	6	20	8		318	33	23	0	44	52	3	1,271	0	0	4	0	5	0	5	3	5	0	72	0	35	458	0	0	3	2,368
CZ	276	227	18	21		2,716	18	1	1	387	12	3,736	285	6	35	0	28	4	0	178	3,062	38	44	107	5,257	190	0	0	0	16,647
DE		3,536	2,005	1	871	6015	218	102	2329	3,610	366	34,142	21,823	40	266	610	3,074	482	6		119,779	2,512	494	4,889	7,478	2,288	2	0		216,911
DK	55	119	59	0	543	6,245		48	20	110	18	3,637	1	12	3	152	38	48	0	30	5,907	36	186	96	15	212	12	0	64	17,666
EE	18	12	0	0	432	176	3		0	2	59	1,115	102	0	1	38	6	5	0	6	57	0	13	0	0	9	0	0	5	2,059
EL	171	169	179	9	547	1,023	188	2	20	243	75	3,986	54	1	74	2	29	1	1	123	60	25.550	313	(12	88	2,272	0	0	32	9,652
ES		1,062	404	0	599	10,390	360	12	20	114	168	24,392	436	8	427	121	170	25	3	641	4,440		524	613	354	4,762	5		137	86,426
FI	67	83	8	0	547	1,403	792	7,768	0 251	114	02	3,325	177	160	19	296	22	62	0	50	3,643	213	136	256	325	191	0	1	1	18,760
FR HU	349	18,612 178	410 15	0 15	706 568	22,330 1,220	783 17	53	17	9,554 173	93	4,353	1,787	160	1,031	231	32,989 141	58 0	0	1,455	29,042 508	11,515	496	499 20	2,163 419	13,907 151	19 0	0	51	148,610 8,264
IE	52	102	3	0	522	1,220	10	2	0	393	17	2,956	135	3	12	0	80	0	18	41	946	283	29	19	39	797	0	0	4	7,753
IT		1,186	474	0	666	9,796	222	5	45	3,392	80	24,247	1,238	106	12	1	239	12	17	569	2.873	2.149	236	1,575	1.033	2.970	2	2	47	55,688
LT	2,300	58	3	0	335	555	30	14	0	34	10	975	9	0	6		3	16	0	9	3,813	0	6	2	3	2,370	0	0	0	5,905
LU		4.614	2	0	445	18,023	1	1	11	43	10	3,905	229	0	40	- 1		0	16	114	264	103	13	3	6	73	2	0	4	27,969
LV	24	7	0	0	339	139	11	44	0	100	8	1,650	157	0	2	56	8		0	12	392	0	14	15	0	23	0	0	2	3,003
МТ	2	12	0	0	317	27	22	0	0	43	5	1.082	12	0	26	0	1	0		11	2	0	11	0	0	61	0	0	0	1,634
NL	326	12,646	283	11	618	33,738	100	13	258	644	22	8,563	959	176	76	44	717	16	0		15,955	4,700	121	1,109	715	6,788	2	0	56	88,656
PL	129	279	107	0	608	3,936	79	11	3	574	15	7,776	89	29	64	1	61	3	0	41		52	71	186	176	204	0	0	18	14,512
PT	30	290	15	0	525	1,191	183	1	7	2,955	37	6,451	9	4	13	0	36	0	0	27	147		112	36	2	506	0	0	2	12,579
RO	491	129	85	30	541	928	8	0	25	361	9	4,060	2,960	1	113	0	27	0	0	221	477	28	20	74	0	141	0	0	23	10,752
SE	163	292	86	0	559	4,283	682	297	1	238	759	5,660	332	116	24	23	38	62	0	82	6,070	160		80	260	270	0	0	89	20,626
SI	233	31	8	26	427	521	2	0	0	52	5	1,555	36	0	28	0	114	0	0	42	348	0	108		245	21	0	0	0	3,802
SK	218	94	7	0	662	607	7	0	0	95	6	2,158	247	4	29	0	9	1	0	9	169	0	5	22		65	0	0	3	4,417
UK	396	1,305	43	27	577	8,284	446	10	24	1,696	104	18,955	532	184	125	17	216	46	33	540	3,340	276	113	252	125		14	2	223	37,905
CH	1,223	621	0	0	560	11,295	43	31	0	406	22	11,418	91	26	605	8	350	22	0	172	693	154	201	100	4	1,169	0	1	28	29,243
IS	9	11	0	0	314	427	26	3	0	10	2	547	0	0	29	15	3	0	0	2	276	482	11	52	7	11	1	0	8	2,245
LI	40	1	0	0	307	161	0	0	0	0	2	264	0	0	0	0	1	0	0	0	36	0	0	0	0	0	0		0	812
NO	247	145	42	0	527	4,190	3,285	927	0	171	329	2,039	140	109	22	1,089	54	1,358	0	60	13,777	1,100	1,470	118	104	2,521	4	0		33,828
Tot	12,978 4	46,212	4,743	143	15,803	192,093	7,071	9,454	3,179	26,885	2,451	232,102	36,178	1,074	3,320	2,743	46,827	2,277	101	9,437	238,946	66,001	5,171	13,032	21,213	43,251	67	39	1,065	

Source: EC Reports (2009), elaborated by Ismeri Europa. Administrative data on E101 forms issued according to Council Regulation (EC) No 1408/71.

* Posting according to Art. 14(1)(a), 14a(1)(a), 14b(1), 14b(2), Council Reg. 1408/71 - E101 certificates are issued in the sending countries.

RO and CH do not provide data of sent postings by receiving country.

Table A3. Postings (E101 certificates) country by country 2008 (number of cases)

то	FROM	*																										
то	AT	BE	CY	CZ	DE	DK	EL	ES	FI	FR	HU	ΙE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SI	SK	UK	IS	LI	NO	Total
AT		276	0	1203	19230	188	13	236	71	4222	2551	5	721	10	77	5	2	253	3282	259	129	1813	1795	1055	0	14	7	37,417
BE	417		3	1086	17446	108	95	1001	244	40480	2289	98	1448	83	11046	24	6	3139	21304	1375	786	1804	3338	1295	17	1	67	109,000
BG	177	39	0	135	821	38	28	126	21	1085	68	0	242	0	20	0	0	16	701	1	20	84	134	115	0	0	6	3,877
CY	90	93		22	119	20	158	34	15	821	10	0	149	0	5	6	16	10	12	0	29	0	50	381	0	0	8	2,048
CZ	501	282	1		2217	31	0	387	26	3358	157	2	283	2	14	2	0	29	1859	0	145	198	6362	124	0	0	5	15,985
DE	6476	3899	1	4069		305	1711	3523	473	30384	26952	39	1603	784	5048	435	14	1536	1E+05	1927	6019	6806	10769	2888	10	2	145	227,961
DK	18	122	1	156	4983		8	124	157	2633	395	16	198	184	28	42	0	84	5269	1	9	67	228	229	4	0	75	15,031
EE	27	34	0	11	74	18	0	6	227	794	113	0	142	52	9	0	0	2	247	0	0	0	0	8	0	0	3	1,767
EL	178	117	4	241	870	195		327	98	3693	30	1	385	10	17	9	0	191	236	5	130	47	140	2290	1	0	32	9,247
ES	609	1210	2	579	10318	594	243		507	21991	573	18	2873	241	150	50	7	577	4118	4544	872	734	276	4004	12	11	104	55,217
FI	85	107	0	379	1314	63	49	106		2998	139	13	210	485	31	308	0	44	3661	17	9	387	363	159	0	0	14	10,941
FR	646	19604	1	1694	17267	909	97	11097	381		1772	161	4401	301	38314	110	3	1560	31365	5738	1200	547	4027	12171	28	4	90	153,488
HU	677	275	1	209	1304	7	13	229	77	3432		1	326	1	63	0	1	25	397	5	245	195	1368	139	0	0	19	9,009
ΙE	128	194	1	79	1010	14	1	495	11	2237	73		207	2	46	0	10	34	622	45		10	156	595	0	0	40	6,010
IT	2129	1208	1	1305	8340	212	42	3230	271	19448	743	50		20	805	0	18	645	3067	1153	2496	1445	1315	2712	16	0	59	50,730
LT	15	3	0	120	455	12	1	40	29	724	22	0	153		12	1	1	4	1326	0	0	0	74	7	0	0	4	3,003
LU	147	5609	1	72	15728	3	1	71	11	3732	217	5	244	0		0	17	47	652	21	5	0	56	75	0	0	4	26,718
LV	34	5	0	85	204	9	1	129	25	676	0	0	145	28	10		0	7	191	0	88	14	20	3	0	0	5	1,679
MT	2	10	0	57	240	0	2	148	12	886	3	0	182	0	3	0		8	5	4	0	3	0	60	0	0	3	1,628
NL	446	14797	31	704	28662	101	136	813	67	6796	1296	191	527	203	829	9	24		16781	3604	426	1826	1811	4343	8	0	55	84,486
PL	120	273	0	723	4305	54	3	553	106	6427	77	80	422	6	135	1	1	77		46	83	108	241	135	0	0	20	13,996
PT	96	166	0	90	1382	191	24	3979	124	5240	33	1	346	0	26	0	0	87	360		11	152	12	499	0	0	12	12,831
RO	412	101	11	211	986	7	8	601	24	4635	3370	2	594	12	21	0	4	49	467	65		47	89	55	0	0	10	11,781
SE	247	204	8	352	2850	850	2	161	1052	4529	271	173	250	60	24	109	1	56	7955	36	70	259	1118	218	0	0	71	20,926
SI	280	47	0	25	479	2	0	38	7	1232	53	0	207	0	20	0	0	8	245	0	0		704	28	0	0	0	3,375
SK	378	84	0	1181	840	9	1	107	19	1979	741	8	238	0	20	0	0	13	428	0	1	79	20.5	35	0	0	1	6,162
UK	419	1453	6	605	5307	458	61	4021	376	17192	706	221	933	37	163	7	36	630	3984	223	45	284	205		11	0	350	37,733
CH	1061	808	2	603	13625	33	16	562	425	12325	304	12	6158	4	301	0	1	139	907	20	0	161	192	921	0	4	34	38,618
IS	1	3	0	40	264	21	0	3	3	320	6	0	282	62	1	0	0	0	78	2	14	21	6	1		0	8	1,136
LI	43	2	0	8	315	0	0	0	0	240	0	0	263	0	0	0	0	0	0	0	0	0	0	0	0		0	871
NO	318	148	1	339	3511	3468	3	171	740	1930	240	125	319	1895	26	171	0	96	7060	97	264	71	844	1891	3	0	1251	23,731
Tot	16177	51173	76	16383	2E+05	7920	2717	32318	5599	2E+05	43204	1222	24451	4482	57264	1289	162	9366	2E+05	19188	13096	17162	35693	36436	110	36	1251	

Source: EC Reports (2009), elaborated by Ismeri Europa. Administrative data on E101 forms issued according to Council Regulation (EC) No 1408/71.

BG, EE, SE and CH do not provide data of sent postings by receiving country.

* Posting according to Art. 14(1)(a), 14a(1)(a), 14b(1), 14b(2), Council Reg. 1408/71 - E101 certificates are issued in the sending countries.

Table A4. Postings (E101 certificates) country by country 2009 (number of cases)

то	FROM ³	*																												
10	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HU	ΙE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SI	SK	UK	IS	LI	NO	Total
AT		337	69	0	1289	26017	158	6	14	159	68	3167	2514	7	1111	0	74	13	2	266	3570	938	290	2090	1596	1028	1	19	3	44,806
BE	622		370	0	969	17630	69	84	35	983	292	29498	1458	213	1526	180	10618	37	2	3352	18547	3198	1439	1173	2069	1185	1	7	32	95,589
BG	203	22		0	136	958	13	0	33	181	17	1037	296	0	112	9	7	0	0	7	1325	3	183	217	256	74	0	0	7	5,096
CY	66	54	2		17	77	39	7	67	24	5	715	2	0	34	3	2	2	7	5	25	0	10	0	2	352	0	0	7	1,524
CZ	486	199	28	0		2239	6	1	0	249	37	2813	262	2	212	3	137	2	1	78	1284	5	122	34	4462	93	0	1	0	12,756
DE	7817	4068	2412	0	4414		325	63	1267	3616	560	22813	23537	77	2187	858	4238	729	6	1950	107014	4858	11898	6555	7953	1880	6	3	118	221,222
DK	69	80	20	0	58	3504		3	5	176	87	2410	158	2	98	212	15	17	0	99	2786	621	28	15	46	266	20	0	133	10,928
EE	34	18	1	0	7	91	21		0	9	174	596	0	0	18	64	1	58	0	3	110	4	0	0	3	10	0	0	3	1,225
EL	233	101	176	22	203	904	149	27		454	84	3001	25	2	795	33	17	0	0	90	166	1773	307	14	35	1855	1	0	22	10,489
ES	521	910	80	0	303	8530	361	23	48		355	16115	340	13	3360	207	210	18	2	753	2559	23854	776	209	324	3431	3	4	81	63,390
FI	97	105	6	0	297	1252	27	7037	1	125		2473	155	12	164	652	27	125	0	32	3376	35	42	408	243	216	0	0	13	16,920
FR	770	19081	214	0	1843	18326	1028	143	174	11685	210		1275	207	5445	438	40489	275	2	1197	22579	12694	2903	662	2575	11267	15	2	102	155,601
HU	740	165	7	5	135	1447	7	2	10	286	47	2490		4	278	14	45	0	0	37	481	2	563	109	422	130	1	1	10	7,438
IE	36	125	3	0	41	828	17	2	18	555	11	2077	41		69	0	28	0	1	59	448	469	0	6	17	499	0	0	7	5,357
IT	2046	1032	299	0	1274	9254	226	18	201	3535	206	15934	910	73	15	89	260	2	4	741	2858	1036	5419	1789	645	2445	12	0	57	50,365
LT	9	30	0	0	33	223	8	27	0	13	24	400	15	4	15		0	93	0	1	732	1	4	6	9	2	0	0	6	1,655
LU	299	5043 14	0	0	54	13800 257	9	20	4	70	13	3998 732	132 10	2	154 14	25	7	0	0	56	1191 74	83	22 531	18	21 70	69	0	0	2	25,042 1,921
LV MT	11 8	6	0	0	110 48	337	14	0	0	17	16	912	19	1	79	25	1	0	0	12	14	1442	0	5	70	46	0	0	0	2,976
NL NL	698	16312	392	0	657	25546	112	121	276	1589	74	5553	1160	339	1106	180	329	37	69	12	14671	4087	959	1849	1683	3918	7	1	127	81,852
PL	170	317	7	0	861	4982	208	11	6	622	148	5326	168	16	488	114	110	25	0	139	14071	258	9	74	471	153	0	0	21	14,704
PT	95	168	ó	0	59	1542	144	0	13	4877	269	4407	77	1	212	0	28	0	0	79	263	230	7	312	20	420	25	1	9	13,028
RO	415	197	167	0	151	1762	19	2	29	599	16	2959	1562	0	397	2	17	0	0	49	523	46	,	197	138	57	0	0	16	9,320
SE	271	156	16	0	291	2824	781	185	2	283	1172	3531	287	444	229	706	54	291	0	83	6912	827	138	363	485	257	1	0	203	20,792
SI	248	28	1	0	16	520	1	1	1	52	5	1090	397	0	165	0	4	0	0	15	321	0	0		90	14	0	0	0	2.969
SK	662	66	5	0	2116	1085	4	0	2	120	15	1221	494	0	164	0	55	0	0	37	935	56	10	96	7.0	42	0	6	2	7,193
UK	505	1414	57	2	817	5352	399	9	43	3356	285	13648	647	244	1165	34	164	4	12	394	4362	121	49	880	510		7	9	271	34,760
СН	1137	621	1	0	699	16761	22	22	12	504	283	9511	289	23	10279	8	304	8	1	158	1158	8302	17	501	250	1087	0	10	19	51,987
IS	1	7	0	0	15	206	10	0	0	9	9	319	0	0	3	15	1	0	0	0	28	10	35	11	6	2		0	12	699
LI	47	0	1	0	14	396	0	0	0	0	0	276	0	0	1	0	3	0	0	0	0	95	0	0	0	0	0		0	833
NO	441	98	31	0	223	3695	2884	570	3	194	440	1752	173	254	75	1639	28	235	0	229	6062	194	355	242	282	1482	22	0		21,603
Total	18,757	50,774	4,366	29	17,150	170,345	7,063	8,384	2,265	34,349	4,929	160,774	36,403	1,941	29,955	5,486	57,276	1,971	112	9,924	204,374	65,012	26,116	17,835	24,688	32,284	123	64	1,291	

Source: EC Reports (2009), elaborated by Ismeri Europa. Administrative data on E101 forms issued according to Council Regulation (EC) No 1408/71.

SE and CH do not provide data of sent postings by receiving country.

* Posting according to Art. 14(1)(a), 14a(1)(a), 14b(1), 14b(2), Council Reg. 1408/71 - E101 certificates are issued in the sending countries.

Table A5. Sectoral breakdown of postings (years 2007 and 2009)

			Secto	ors of economi	c activity (in %	of total) - yea	r 2007		
		Industry N	ACE C to F			Services N	NACE G to P		
l	Agriculture,		of which				of which		
FROM		Industry Total	Construction NACE F	Services Total	Wholesale and retail trade NACE G	Hotel and restaurants NACE H	Transport, storage and communicati on NACE I	Financial, business activities, ect. NACE J and K	Health and social work NACE MNO
BE	0.1%	56.1%	32.9%	43.8%	4.4%	1.1%	1.0%	1.6%	
CZ	0.5%	31.0%	22.5%	68.5%	0.8%	0.2%	66.3%	1.2%	
EE	4.2%	88.7%	64.3%	7.1%	0.1%	0.1%	2.3%	3.3%	
IE	0.1%	50.6%	41.4%	49.3%	3.1%	2.7%	8.4%		
EL		20.4%	20.4%	79.6%	0.4%	0.2%	4.2%	74.8%	500000000000
CY		3.0%	2.7%	97.0%	0.1%	9.3%	67.5%	19.8%	
LV	1.9%	27.5%	6.1%	70.6%	2.0%	0.9%	48.0%	12.7%	
LT		79.1%		20.9%	0.2%		0.2%	20.5%	
LU	0.2%	20.8%	13.9%	79.0%	1.7%	0.1%	17.8%	57.8%	1.6%
HU	0.2%	78.0%	29.3%	21.8%	7.5%	11.4%	0.8%	2.0%	0.1%
MT		5.9%	3.0%	94.1%		1.0%	3.0%	89.1%	1.0%
AT	0.7%	66.6%	29.9%	32.7%	5.5%	4.6%	8.2%	8.1%	6.4%
PT	1.0%	96.6%	57.2%	2.4%	0.2%	0.0%	1.8%	0.4%	0.0%
RO	0.2%	88.1%	26.3%	11.7%	0.0%	2.3%	7.4%	1.9%	0.2%
FI	5.4%	52.7%	8.4%	41.9%	1.5%	5.5%	22.1%	4.0%	8.7%
UK		0.7%	0.0%	99.3%					
IS	58.0%	1.8%	25.9%	40.2%			10.7%	28.6%	0.9%
LI		76.9%	0.0%	23.1%	10.3%		12.8%		
Sum	0.5%	45.6%	26.3%	53.9%	1.6%	1.2%	25.0%	10.3%	4.0%

			Secto	ors of economic	c activity (in %	of total) - yea	r 2009		
		Industry N	ACE C to F				NACE G to P		
			of which				of which		
FROM	Agriculture, hunting and fishing NACE A, B	Industry Total	Construction NACE F	Services Total	Wholesale and retail trade NACE G	Hotel and restaurants NACE H	Transport, storage and communicati on NACE I	Financial, business activities, ect NACE J and K	Health and social work NACE MNO
BE	1.4%	50.2 %	25.1%	48.4%	4.0%	1.5%		29.0%	11.9%
CZ	1.7%	55.7%	38.6%	42.6%	3.1%	2.7%	19.3%	3.2%	14.4%
EE	3.0%	86.4%	74.4%	10.6%	0.6%	2.9%	0.1%	0.6%	3.6%
IE	0.1%	28.9%	0.0%	71.0%	0.0%	0.0%	0.0%	0.0%	0.0%
EL	0.0%	66.3%	17.3%	33.7%	0.0%	0.0%	0.0%	0.0%	0.0%
CY	0.0%	12.7%	1.2%	87.3%	1.0%	0.0%	10.8%	73.8%	1.7%
LV	2.6%	77.4%	27.9%	20.0%	3.9%	7.0%	0.6%	3.7%	4.9%
LT	0.9%	69.8%	20.9%	29.3%	0.4%	0.0%	1.1%	21.4%	0.0%
LU	0.1%	29.0%	1.3%	70.9%	0.5%	0.0%	18.5%	47.9%	1.4%
HU	0.2%	75.9%	27.9%	23.9%	0.5%	0.1%	1.0%	0.2%	0.6%
MT	0.9%	66.1%	49.1%	33.0%	4.5%	1.8%	0.9%	24.1%	1.8%
PT	0.8%	95.0%	53.1%	4.2%	0.6%	0.0%	0.3%	0.1%	0.0%
RO	1.1%	83.9%	19.5%	15.0%	0.2%	1.1%	7.9%	1.1%	4.8%
FI	2.4%	70.2%	10.7%	27.3%	1.6%	1.8%	22.2%	1.2%	0.5%
UK	0.0%	0.5%	0.0%	99.5%	0.0%	0.0%	0.0%	0.0%	0.0%
IS	25.9%	41.8%	41.8%	32.3%	0.0%	1.5%	14.4%	14.9%	1.5%
LI	0.0%	95.3%	0.0%	4.7%	3.1%	0.0%	0.0%	1.6%	0.0%
Sum	0.7%	54.9%	23.6%	44.3%	1.1%	0.6%	6.7%	15.9%	3.6%

Source: Source: EC Reports (2009 and 2011), elaborated by Ismeri Europa.

Notes: For missing countries no sectoral breakdown of E101 certificates available

The shares are calculated among the total of the three main sectors (Agric., Industry, Services)

and the E101 cerrtificates for which the sector was not metioned were therefore excluded from the total.

Table A6. Posting specialisation index and relevance of posting in terms of employment

Country	Spec. index* average 07-09	Sent postings as % of employment in private sector average 07-09	Received postings as % of employment in private sector average 07-09
AT	43.6	0.6%	1.5%
BE	36.2	1.9%	4.0%
BG	-5.8	0.2%	0.2%
CY	92.6	0.0%	0.8%
CZ	-4.4	0.5%	0.4%
DE	11.7	0.7%	0.9%
DK	31.8	0.5%	0.9%
EE	-69.7	2.2%	0.4%
EL	56.5	0.1%	0.4%
ES	36.1	0.2%	0.5%
FI	54.7	0.3%	1.0%
FR	-12.8	1.3%	1.0%
HU	-64.8	1.5%	0.3%
IE	62.9	0.1%	0.5%
IT	49.7	0.1%	0.3%
LT	-12.3	0.5%	0.4%
LU	-33.6	46.1%	21.8%
LV	8.5	0.3%	0.3%
MT	87.7	0.1%	1.9%
NL	79.7	0.2%	1.8%
PL	-87.9	2.3%	0.2%
PT	-51.5	1.6%	0.4%
RO	-14.7	0.3%	0.2%
SE	65.4	0.2%	0.8%
SI	-64.5	2.4%	0.5%
SK	-63.7	1.6%	0.3%
UK	-0.4	0.2%	0.2%
EU-27		0.75%**	0.70%**
EU-15	14	0.6%	0.8%
EU-12	-66	1.6%	0.3%

SOURCE: EC Reports (2009 and 2011) and Eurostat, elaborated by Ismeri Europa.

Note that "Postings" refers to the number of E101 certificates issued for posting according to

 $Art.\ 14(1)(a),\ 14a(1)(A),\ 14b(1),14b(2),\ Council\ reg.\ 1408/71,\ sent\ to\ EU\ 27\ or\ EFTA\ Countries$

*The "posting specialisation index" is calculated as the net flow (received - sent) on total flows

(received + sent). It moves from -100 (max in sending) to +100 (max in receiving).

In the table, averages are calculated for the period 2007-2009.

^{**} Data on received postings underestimate the total number of received postings because of limits in recording postings in receiving countries. For this reason there is a small discrepancy between the Totals in the second and third column.

Econometric analysis on the main drivers of posting

Through different analytical steps - Pearson correlation¹, multivariate cross section analyses on national data over the period 2007-2009 (Table A7) and multivariate analyses on country by country flows of posting and the differentials in the relevant variables for the year 2007 (Table A8) - the most relevant drivers able to explain the phenomenon of posting have been identified.

While correlations (Table A9) provide rough and preliminary indications of the relevance of the determinants of posting, the multivariate analyses allow to simultaneously considering both the combined influences of the different drivers on the (relative/absolute) extent of outflows and inflows of posting and the role of country by country differentials in the relevant variables on the flow of posting between each pair of countries.

This analytical exercise provides the direction (sign) of the relevant drivers. The positive sign of a significant coefficient corresponding to a variable in the regressions means that such variable (driver) enhances or favours posting. On the contrary a negative sign means that the corresponding variable (driver) hinders the phenomenon. The size of the coefficients must be interpreted very cautiously since they cannot be directly used as elasticity.

Although the shortage of data prevents the drawing up of a statistically robust forecasting model², the present multivariate analyses provide a clearer picture of the relations between the extent of posting (sent/received, net flows, in absolute terms or in comparison to the total employment) and the variables which describe the main drivers of the phenomenon (Table A7). The labels and the descriptive statistics of the variables used in the cross section analyses are provided in Table A10 and A11. Furthermore, the country by country multivariate analysis (Table A8) clarifies how differentials in variables which represent drivers of posting determine the flow of posting from a certain country to another specific one (labels and descriptive statistics in Table A13).

The results of the empirical analyses show that, at country level (cross section analyses) - the most relevant drivers of the extent of posting are unemployment, labour costs - and by deduction, skill/specialisation shortage -, trade union membership and market integration. In addition, country by country multivariate analysis explains that the flows of posting from a certain country to another specific country are mainly explained by the geographical proximity and the differentials in labour cost (this evidence in confirmed by the case studies).

The results of the empirical analysis are presented in details below. The emerging picture of the phenomenon shows that some drivers of the extent of posting are mainly relevant from sending perspective and others from receiving perspective. However, given that the posting of workers implies outflows of workers from a country to other countries and therefore also inflows to a country from other ones, all the significant drivers come into play in determining the extent and the features of the phenomenon in each single country.

¹ The Pearson correlation coefficient has been calculated as a measure of the correlation between two variables. It gives a value between +1 and -1 inclusive. When possible, correlations have been calculated also on a disaggregated base (country by country over the period 2005-2009). Table A9 shows the Pearson correlation matrix.

² Furthermore, a problem of specification surely emerges in the multivariate analyses since posting (in terms of the several indicators used in the present study) is determined by its drivers and, at the same time, influences the drivers themselves (i.e. market integration can favour posting and can be favoured by posting).

Unemployment: the main driver from sending perspective

A significant positive correlation exists between the unemployment rate (year 2007) and the level of outward postings. As expected, a significant negative correlation exists between the unemployment rate (year 2007³) and the net flows of the posting and the specialisation index. This evidence shows that the posting of workers generally goes from countries with a higher unemployment rate to countries with a lower unemployment rate. These correlations show that there is no evident link between inward posting and the level of local unemployment at this aggregate level of data. Therefore, it reasonable to assume that postings do not create a relevant pressure on the overall national labour market in terms of job displacement while instead postings seem to move toward economies which can offer more job opportunities.

The cross-section analysis at country level confirms this evidence and shows that, from a sending perspective, the unemployment rate is the variable - and the driver - which explains posting (outflow of sent postings) more clearly (see Table A7, section a.). The same conclusion can be drawn looking at the cross section analysis on the net flows of posting (see Table A7, section b.). On the contrary, the outflow of sent posting weighed by employment is not explained by the unemployment rates, probably because this indicator of posting is affected by a number of factors related to the labour market (workers' preferences, institutional and regulatory aspects) which cannot be captured in this kind of analysis.

From receiving perspective the multivariate cross section analysis does not provide any significant evidence in terms of unemployment. Notice that the preponderance of unemployment as driver from sending perspective does not exclude that the other typical drivers play a role in determining the outflows of posting, although with less relevance.

Labour cost and trade union membership: the main drivers from receiving perspective

A positive and significant Pearson correlation exists between hourly labour costs and every indicator concerning received postings (level of received postings, number of received postings on employment in the private sector). Net flows of postings and the specialisation index show a positive correlation with labour cost⁴. This is as expected since reduction in labour costs is a driver for posting and flows of posting typically go from countries where labour costs is lower to countries where labour is more expensive.

According to the multivariate cross section analyses, from a receiving perspective (see Table A7, section c.), the labour costs and the levels of trade union membership are, together, the variables which mainly explain the number of received postings. In particular, the sign of the coefficient of labour cost confirms that such variable is a determinant for utilising workers from low labour cost countries posted in high labour cost countries. The negative sign of the coefficient of trade union membership5 indicates that trade union participation — and consequently the potential broader role of trade unions in industrial relations and in determining working and employment conditions tends to limit the use of posting. Cross-sections have been carried out also including different sectoral labour costs as explanatory variables.

³ Correlation maintains the same sign but becomes statistically insignificant for years 2008 and 2009, perhaps because of the prevalent effects of the economic crisis.

⁴ Correlation calculated on country by country data of the net flows of posting and the differences in hourly labour cost confirms this evidence. Different type of labour costs have been considered (total, sectoral, etc.). In the text we refer to hourly labour cost in the private sector in 2008.

⁵Data on trade union membership are provided by Eurofound. Here the number of members of trade unions is weighted by employment in the private sector.

In particular, the sectoral labour cost in the construction sector seems the variable with the best econometric results (Table A7, section e.). This suggests that in constructions, posting have a more relevant role. Labour costs in the financial sector have also been considered (Table A7, section f.) and provide similar evidence.

Table A7. The main results of the cross-section analyses at country level

Independent variables	В	t	Sig
(Constant)	-69205.2	-1.688	0.10
UNR_07	16988.73	2.755	0.01
_		R	\mathbb{R}^2
		0.490	0.24
b. Dependent variable: PNF_07			
Independent variables	В	t	Sig
(Constant)	70650.89	2.112	0.04
UNR_07	-11980.1	-2.381	0.02
		R	\mathbb{R}^2
		0.437	0.191
c. Dependent variable: PR_07			
Independent variables	В	t	Sig
(Constant)	1952.897	.133	0.89
LC_TOT_08	4175.226	5.009	0.00
SIN_EU27100	-358.409	-3.658	0.00
		R	\mathbb{R}^2
		0.729	0.532
d. Dependent variable: PR_ONE	MP_07_09		
Independent variables	В	t	Sig
(Constant)	136	529	0.602
LC_TOT_08	.153	4.026	0.00
GDPPC_07	028	-3.247	0.00
MKT_INT_07	.008	2.659	0.01
		R	R ²
D I (II DNET 05		0.730	0.532
e. Dependent variable: PNFI_07 Independent variables	В	4	Sig
(Constant)	-34.398	-1.803	0.084
LC_CONST_08	2.856	2.904	0.003
EC_CONST_00	2.030	R	R ²
		0.510	0.26
f. Dependent variable: PNF_ON	EMP 07 09		
Independent variables	В	t	Sig
(Constant)	956	-2.727	0.01
LC_FIN_08	0.032	3.132	0.00
	0.052	R 3.132	\mathbb{R}^2
		0.539	0.290

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Skill/specialisation shortage: a driver for "relatively high labour cost" countries

Combining evidence on the role of labour cost as driver which favours posting from sending perspective, statistical evidence concerning the flows of posting, and anecdotal evidence emerging from the case studies some additional reflections can be drawn on alternative drivers of posting. In fact, labour cost cannot be considered as the main driver of the posting of skilled and specialised workers, especially when they are posted from relatively high labour cost countries to relatively low labour cost countries. In such type of posting, the shortage of skills and specialisation is probably an important driver of the phenomenon. Skills and specialisation can in fact explain large part of posting from non-specialised countries and in general posting between high labour cost countries (i.e. from France to Belgium and Germany or from Germany to Austria, France and Belgium, etc.), and from high labour cost countries to low labour cost countries (from France and Germany to Czech Republic or Romania, etc.). As explained above, the significance of the skills/specialisation shortage as driver of posting cannot be tested econometrically because of data limitation, but anecdotal evidence supports these conclusions.

Service market integration: a transversal driver

A "service market integration index" has been calculated as the ratio of international total flows in services (credit and debit) with EU-27 trade partners and the value added in services. This indicator shows a significant correlation with a number of indicators concerning posting (see Table A9). In particular, market integration is positively correlated with both sent and received postings weighed by the number of employees in the private sector. This preliminary evidence must be interpreted very cautiously and does not imply a causal relationship. However, the signs of the correlations suggest that countries which are strongly integrated in the EU market of services use posting to a significant extent in both directions. From this kind of analysis it is impossible to say whether posting determines greater service market integration or *vice versa*. Given the small overall number of postings, probably it is the posting of workers which is sustained by a background of well-developed transnational trade in services.

The cross-section analysis on the received postings weighed by employment as a dependent variable (see Table A7, section d.), shows that besides labour costs, also GDP per capita and market integration are statistically significant determinants. The negative sign of the coefficient of GDP per capita and its collinearity with labour costs indicates that high labour cost receiving countries attract/use posted workers less than the advantages in terms of labour costs justify. Finally, market integration seems to favour posting.

How drivers determine the destination of posting

The empirical study has been further developed carrying out an analysis on the country by country flows of posting (E101 data) registered in 2007⁶. This analysis allows taking into account the role of the geographical proximity and of the country by country differentials in the relevant socio-economic variables as determinants of the specific destination of posting from a certain country to another one.

⁶ The most reliable country by country breakdown of E101 data is available for 2007. Missing data of Romania have been replaced assuming that the total number of posted workers from Romania in 2007 was distributed according to the breakdown emerging from country by country data of 2008. For the UK, the available breakdown represents the 90% of total posted worker and not the total of sent postings.

The geographical proximity has been described using a dummy variable. This takes value 1 when there is "proximity" between the two countries considered, and value 0 otherwise. In particular, there is geographical proximity either between neighbours or between countries which are traditionally strongly linked by trade or migration (i.e. Poland with Germany, but also Denmark and Sweden, etc.). Table A12 shows the values taken by this dummy variable for each country.

The analysis is carried out on 702 observations of flows, country by country. The estimations have been performed using as dependent variables:

- the country by country absolute number of sent postings from the sending MS to the destination MS (Table A8, a.),
- the country by country number of postings sent from the origin MS as share of the total number of postings received by the receiving MS (Table A8, b.),
- the country by country number of postings sent from the sending MS as share of the total number of postings sent from the MS itself (Table A8, c.).

In Figure A1 the relationships between these variables are plotted. Actually, many pairs of countries show a strong "geographical specialisation" as partners since the percentage of postings sent in certain country represents both a very relevant share of the total number of sent postings and a significant share of the received postings by the receiving country.

Every dependent variable has been analysed in relation to the country by country differentials of the main socio-economic variables already studied above in the cross section analyses. As showed in Table A13, Pearson correlations between dependent and independent variables are mostly significant (especially the correlations with the flows as percentage of total received/sent postings).

The correlations between the dependent variables and the dummy of geographical proximity are always strongly significant. Furthermore, the correlation between the dependent variables and the differentials in labour costs are as expected - positive from receiving perspective and negative for sending perspective. This evidence confirms the role of labour costs as one of the driver of posting, and also indicates that geographical proximity in a crucial factor for posting.

On the other hand, the correlations with the differentials in the unemployment rates are unexpected with respect to the evidence and the theory described in the previous subsection. Indeed, the correlation between the number of postings sent from a country as share of total sent postings and differentials in unemployment rates is negative. *Vice versa* a positive correlation exists with the number of postings sent from a country as share of postings received by the receiving MS. This evidence can be explained by the fact that some large countries such as Germany experienced relatively high unemployment rates in 2007.

Although not always statistically significant, variables such as the trade union membership and the productivity have signs of Pearson correlation which confirm the previous evidence and the theory. In particular, the correlation with the differentials in productivity seems to indicate that generally the postings go from countries with lower labour productivity to countries with higher labour productivity making posting a means to allocate the labour force more efficiently.

The Person correlations between the dependent variables and the differentials in the growth rates of GDP and employment in construction and in financial and real estate sectors⁷ show

 $^{^{7}}$ These explanatory variables have been considered both only for 2007 and over the period 2005-2007.

unexpected signs. However in the multivariate analysis these explanatory variables loose statistical significance with the exception of the growth rate in the financial and real estate sector which in the case of the number of postings as share of received postings has a statistically significant positive coefficient as expected (Table A8, b.).

With respect to the market integration, the Pearson correlation (and the multivariate analysis in Table A8, b.) confirms that high integration in service market favours posting from a receiving perspective. Actually, the share of postings received from a certain MS is larger in countries with high market integration.

Finally, multivariate analyses have been carried out simultaneously considering country by country differentials of the all relevant variables and the geographical proximity dummy. These analyses allow verifying the combined impact of these explanatory variables on the flows of posting from a certain country to another certain country. Table A8 summarizes the results of the estimations.

The regressions with the absolute number of postings sent from the origin country to another certain MS (Table A8, a.) shows a R² not very high (10%). The geographical proximity together with the differential in labour costs in the financial sector⁸ mostly explain the absolute number of posting sent to a certain MS while the other explanatory variables do not have any statistical significance.

Regressions on the number of postings sent from the origin country as share of the total number of postings received by the receiving MS (Table A8, b.) and the number of postings sent from the sending MS as share of the total number of sent postings (Table A8, c.) shows greater R^2 (24% and 19%, respectively).

In particular, the results of the regression on the number of postings sent from the origin MS as share of the total number of postings received by the receiving country (Table A8, b.) are interesting since many explanatory variables are statistically significant. In fact, according to the cumulative R², the geographical proximity, the differentials in unemployment rates, in labour costs, and in trade union membership are the variables that mostly explain the destination of posting from a certain country to another one. The other significant independent variables play a very limited role in determining the phenomenon (low contribution to the cumulative R²).

The regression on the number of postings sent from the sending country as share of the total number of sent postings (Table A8, c.) establishes that the geographical proximity and the differentials in labour costs are the variables that mainly explain the country by country flows of posting.

Generally the signs of the coefficients resulting from the multivariate analysis confirm the picture outlined above trough the cross-section analyses.

⁸ Among EU27 countries, 2008 labour cost in the financial sector shows a standard deviation 50% greater than standard deviation of total labour cost and labour cost in construction sector. This probably explains why differentials in labour costs of financial sectors better grasp country by country differences in labour costs.

Table A8. The main results of the country by country multivariate analysis

Independent variables	В	t	Sig.	$\mathbf{R}^{2}\left(\mathbf{a}\right)$
(Constant)	667.34	2.79	0.005	
GEOG1	5616.26	8.49	0.000	0.093
LCFIN_08	-23.72	-2.47	0.014	0.101
		1	Durbin-Watson	1.774
b. Dependent variable: % on receiv	/ed			
Independent variables	В	t	Sig.	R ² (a)
(Constant)	2.82	8.03	0.000	
GEOG1	7.84	8.08	0.000	0.072
UNR07	0.78	5.91	0.000	0.113
LC-TOT_08	0.77	6.18	0.000	0.145
SIN_ONEMP08	-0.10	-7.62	0.000	0.204
LCFIN_08	-0.19	-2.65	0.008	0.210
EMPL_GR_AV0507	-1.19	-4.52	0.000	0.218
MKT_INT_07	0.03	3.94	0.000	0.222
GDP_PC07	0.0002 b)	-3.41	0.001	0.229
S_FINRE_GR07	0.34	3.03	0.003	0.239
			Durbin-Watson	1,215
c. Dependent variable: % on sent				
Independent variables	В	t	Sig.	R ² (a)
(Constant)	2.803	8.448	0.000	
GEOG1	7.962	8.687	0.000	0.088
LC-TOT_08	-0.201	-7.778	0.000	0.131
UNR07	-0.407	-3.436	0.001	0.158
SIN_ONEMP08	0.045	3.872	0.000	0.177
EMPL_GR_AV0507	0.511	2.899	0.004	0.187
		•	Durbin-Watson	1.861

(a) Cumulative R2(b) Coefficient is close to 0 because variables are not standardized.

Labels and descriptive statistics in Table A13. Only significant variables are showed in the table.

Source: Ismeri Europa, elaboration of data from Eurostat and EC on E101.

The signs of the coefficients of the differentials in total labour costs (Table A8, b. and c.) support the idea that flows of postings go from countries/sector with less expensive labour to countries/sector with higher labour costs. The negative sign of the coefficient of the differentials in labour costs of the financial sector (Table A8, b.) is probably due to the fact that the regression include also other labour cost differentials (total and construction sector) and can indicate both the prevalence of posting in non-financial sectors and that relevant outflows come from countries where labour costs in financial sector is relatively high (Luxembourg and UK) and therefore can be connected to skill/specialisation shortages.

The previously explained roles of the trade union membership as a factor able to hinder posting (Table A8, b. and c.) and of service market and GDP per capita as drivers which favours posting especially from a receiving perspective (Table A8, b.) are confirmed here.

On the other hand, the differentials in unemployment rates and in the growth rate of employment over the period 2005-2007 show unexpected signs, once again probably because large countries have experienced relatively high unemployment rates and low growth rates of employment.

Conclusions

From the empirical analyses presented above some conclusions on the drivers of posting can be drawn. Information collected by national cases studies supports the empirical results on drivers of posting and their relevance.

- a. The unemployment rate from a sending perspective and labour costs for a receiving perspective are the main explanatory variables of the extent of posting. Since labour costs and unemployment rates are strongly correlate to the GDP, the future trend of GDP will be a significant predictor of posting;
- b. The main results of the statistical and empirical analyses reinforce the idea that there are two main types of posting. On the one hand, low-medium skilled workers are posted from low labour cost to high labour cost countries, mainly in labour-intensive sectors. On the other hand, skill and specialisation shortage is another relevant driver since medium-high skilled workers are posted in qualified occupations.
- c. Market integration and trade union membership are determinants of posting, although less relevant.
- d. According to the multivariate analyses, variables such as productivity and indicators which describe the sectoral dynamics do not play a significant role in posting.
- e. The geographical proximity seems to be the most relevant factor (it is not exactly a driver) able to explain the direction of the flows of posting;
- f. The country by country analyses confirm the relevance of the role of labour cost as driver of posting. By deductive reasoning this also confirm the relevance of skill/specialization shortage to explain posting from countries/sectors where labour cost is relatively high;
- g. In the regressions including the dummy of geographical proximity some relations between posting and other drivers change with respect to the evidence emerging from the cross-section analyses (i.e. the case of unemployment rates). This lead to conclude that in some cases the geographical proximity prevails in determining postings also in context where the other drivers do not perform as described by the theory or as it emerges from the evidence at country level;
- h. The unexpected signs of the differentials in unemployment rates resulting from the regressions with the geographical proximity confirm that, given the geographical proximity and the labour cost convenience, also countries with low unemployment rates and high economic growth exploit posting as a means of market integration and business opportunities;
- i. Surely institutional and regulatory variables should be included in the analysis to capture their relevance on the phenomenon. However they are not available for this kind of analysis. The OECD employment protection index (EPI)which has been considered in the present study shows no significant correlations with indicators of posting⁹;
- j. Finally, although this empirical study provides relevant information concerning the drivers of posting and how such drivers affect the extent and the destination of posting, two analytical limitations must be recognised. First lack of data prevents a more detailed analysis at sector level where probably effects, relations and dynamics between variables

⁹In the cross-section analysis, the EPI index has not been included because time invariant over the period 2005-2009 and not available for every country. Luxembourg has been excluded from the analysis of Pearson correlations because it is clearly an outlier. Other qualitative indicators concerning the level of labour protection cannot be included in our kind of analysis (for instance indicators from "Doing business" of World Bank).

are more significant, clearer and unambiguous than at aggregated level. Second, a problem of specification surely emerges in the multivariate analyses since posting is determined by its drivers and, at the same time, influences the drivers themselves.

Table A9. Pearson correlations: posting indicators and socio-economic variables

Received_ 08 Received_ 09 Net Flow_07 Net Flow_08	-,662**	,621**	-,636**	,993** 0.202	,997** 0.158 0.304	0.150 0.293	953**	1																			
Net Flow_09 Specialis. 07-09	-,452* -,385*	-,462*	-,471* -,412*	,408*	,382* 0.121	0.380 0.129	,935** ,615**		,641**	1																	
Sent on Empl. Priv_07-09 Received on Empl_07-09		0.141	0.151			-0.025 0.105					,919**	1															
Net Flow on Empl_07-09 Trade union mbs	-0.275	-0.240	-0.244	-0.039	-0.048	-0.061	0.300	0.240	0.223		0.293	,486*	-0.071	1													
Lab. Cost _08 Unempl. R_07 Unempl. R_08	,489**		0.133 ,513** 0.297	0.220	,529** 0.221 0.150	0.235	0.340 -,393* -0.148		-0.347		0.204 -0.165 -0.092	-0.248		.597** -0.290 -0.309	-0.268 -0.224	,825**	1										
Unempl. R_09 Mkt integr_07	-0.055 -0.043	-0.061 0.011	-0.070 0.031	-0.092 -0.016		-0.126 -0.022	-0.019 0.038	-0,077 -0,030				-0.298 , 790 **				0.327	,711** -0.109	-0.236	1								
Mkt integr08 Mkt integr09 Lab, prod_07	-0.052 -0.059 0.116	-0.005 -0.011 0.120	0.013 0.006 0.106	-0.028	-0.030 -0.026 .463 *	-0.035 -0.031 .457 *	0.033 0.046 0.293	-0.026 -0.014 0.340			,803** ,762** 0.355	,	-,727** -,688** -0.151	,489**	0.355 0.363 .923**		-0.100	-0.224	.984** .975** .453*	,997** ,473*	.472*	1					
Lab. prod_08 Lab. prod_09 GDP_PC_07		0.121 0.114 0.097	0.107 0.101 0.087	,462*	'	,464* ,453* 0.340	0.298 0.298 0.216	0.346 0.343 0.242	,	,453* ,460* 0.346		,516** ,524**	-0.143	,506** ,514** ,521**	,926**	-0.266 -0.264 -0.356	-0.227	-,383*	,441* ,445* ,621**	,460* ,463* .633**	,459* ,462* .622**		,999**	.957**	1		
GDP_PC_ 09	0.098	0.107 0.107	0.096	0.357	0.354	0.350	0.215 0.218	0.241	0.285	0.343	,561** ,560**	,677**	-0.378	,522** ,528**	,871**	-0.352 -0.343	-0.267	-0.376	,624**	,635**	,623**	,958**	,954**	,957** ,959**	,999** ,998**	1999**	1
				eceived_07	80 _bə.	eceived_09	Flow_07	80	Flow_09	pecialis. 07-09	on Empl. _07-09	Received on Empl_07-09	Net Flow on Empl_07-09	union	Cost_08	nempl. R_07	nempl. R_08	mpl. R_09	integr_07	integr_08	integr_0	od_07	prod_08	ab. prod_09	3DP_PC_07	_PC_ 08	GD P _PC_ 09

 ${\bf Table\ A10.\ Labels\ and\ description\ of\ the\ variables\ used\ in\ the\ cross-section\ analyses}$

PS_07	Posted workers sent in 2007 (n.)
PS_08	Posted workers sent in 2008 (n.)
PS_09	Posted workers sent in 2009 (n.)
PR_07	Posted workers received in 2007 (n.)
PR_08	Posted workers received in 2008 (n.)
PR_09	Posted workers received in 2009 (n.)
PNF_07	Posted workers net flow in 2007 (n.)
	1. 1
PNF_08	Posted workers net flow in 2008 (n.)
PNF_09	Posted workers net flow in 2009 (n.)
PNFI_07	Posted workers net flow on total (in&out) posted in 2007 (%)
PNFI_08	Posted workers net flow on total (in&out) posted in 2008 (%)
PNFI_09	Posted workers net flow on total (in&out) posted in 2009 (%)
PNFI_AV_07_09	Posted workers net flow on total (in&out) posted (average 2007-2009, %)
PSGR_08_09	Growth rate of posted workers sent in 2008-2009 (annual average, %)
PRGR_08_09	Growth rate of posted workers received in 2008-2009 (annual average, %)
EMGR_TOT_08_09	Growth rate of total employment in 2008-2009 (annual average, %)
GDPPC_09	GDP per capita in 2009 (EU27=100)
PS_ONEMP_07_09	Posted workers sent on employment in the private sector (average 2007-2009, %)
PR_ONEMP_07_09	Posted workers received on employment in the private sector (average 2007-2009, %)
PNF_ONEMP_07_09	Posted workers net flow on employment in the private sector (average 2007-2009, %)
SIN_ONEMP_08	Membership in trade union on total employment in 2008 (%)
SIN_EU27100	Membership in trade union on total employment in 2008 (EU27=100)
LC_TOT_08	Labour cost in total economy in 2008 (Euro per worked hour)
LC_CONST_08	Labour cost in construction in 2008 (Euro per worked hour)
LC_SERVPR_08	Labour cost in private services in 2008 (Euro per worked hour)
LC_HOT_08	Labour cost in hotel and restaurant in 2008 (Euro per worked hour)
LC_TRAN_08	Labour cost in transport y in 2008 (Euro per worked hour)
LC_FINRE_08	Labour cost in financial and real estate sector in 2008 (Euro per worked hour)
LC_FIN_08	Labour cost in financial sector in 2008 (Euro per worked hour)
UNR_07	Unemployment rate in 2007 (%)
UNR_08	Unemployment rate in 2008 (%)
UNR_09	Unemployment rate in 2009 (%)
VAGR_PRIV_07	Annual growth rate of the private sector of 2007 (%)
VAGR_PRIV_08	Annual growth rate of the private sector of 2008 (%)
VAGR_PRIV_09	Annual growth rate of the private sector of 2009 (%)
VAGR_CONST_07	Annual growth rate of construction of 2007 (%)
VAGR_CONST_08	Annual growth rate of construction of 2008 (%)
VAGR_CONST_09	Annual growth rate of construction of 2009 (%)
VAGR_FIN_07	Annual growth rate of financial sector of 2007 (%)
VAGR_FIN_08	Annual growth rate of financial sector of 2008 (%)
VAGR_FIN_09	Annual growth rate of financial sector of 2009 (%)
MKT_INT_07	Index of market integration in services in 2007 (net flow on total in and out flows, %)
MKT_INT_08	Index of market integration in services in 2008 (net flow on total in and out flows, %)
MKT_INT_09	Index of market integration in services in 2009 (net flow on total in and out flows, %)
LAB_PROD_07	Labour productivity of total economy in 2007 (Euro per hour)
LAB_PROD_08	Labour productivity of total economy in 2008 (Euro per hour)
LAB_PROD_09	Labour productivity of total economy in 2009 (Euro per hour)
GDP_PC_07	GDP per capita in 2008 (Euro)
GDP_PC_08	GDP per capita in 2007 (Euro)
GDP_PC_09	GDP per capita in 200 (Euro)
GDP_PC_GR_08_07	Annual growth rate of total GDP per capita in 2008 (%)
GDP_PC_GR_08_08	Annual growth rate of total GDP per capita in 2009 (%)
	• • •

Table A11. Statistics of the variables used in the cross – section analyses

	N	Min	Max	Average	ST. Deviation.
PS_07	29	101.0	238946.0	36664.690	66283.4393
PS_08	29	76.0	228722.0	35294.310	59666.0770
PS_09	29	29.0	204374.0	34839.517	53008.5482
PR 07	29	1634.0	216911.0	35873.897	50314.1009
PR_08	29	1628.0	227961.0	34289.483	51230.6948
PR 09	29	1225.0	221222.0	34224.414	50128.4952
PNF_07	29	-224434.0	79219.0	-790.793	54185.3784
PNF_08	29	-214726.0	75120.0	-1004.828	49503.5872
PNF_09	29	-189670.0	71928.0	-615.103	44624.0051
PNFI_07	29	-88.5	93.9	18.014	56.5749
PNFI_08	29	-88.5	92.8	12.852	52.7150
PNFI 09	29	-86.6	96.3	8.279	56.2450
PNFI_AV_07_09	29	-87.9	92.6	13.038	53.8184
PSGR_08_09	29	-54.3	329.5	22.824	65.1461
PRGR_08_09	29	-47.0	41.2	-2.362	18.7029
EMGR_TOT_08_09	29	-6.0	3.5	500	2.1763
GDPPC 09	29	19.6	414.0	112.603	88.6440
PS_ONEMP_07_09	29	.0	20.1	1.303	3.6752
PR_ONEMP_07_09	29	.1	9.9	1.055	1.8485
PNF_ONEMP_07_09	29	-10.1	1.9	245	2.1248
SIN_ONEMP_08	28	7.9	88.0	33.646	23.8519
SIN_EU27100	28	31.0	345.0	131.954	93.5357
LC TOT 08	28	2.6	37.7	19.204	11.1069
LC_CONST_08	28	2.0	34.7	17.614	10.4996
LC SERVPR 08	28	2.7	36.4	19.118	10.8060
LC_HOT_08	27	1.6	25.7	11.793	7.0871
LC_TRAN_08	27	3.3	39.0	19.381	10.3850
LC FINRE 08	27	3.6	43.4	22.159	12.5852
LC_FIN_08	28	5.3	55.7	32.314	16.7877
UNR_07	29	2.5	11.2	6.166	2.0944
UNR 08	29	2.6	11.4	6.072	2.0220
UNR_09	29	3.2	18.1	8.603	3.7492
VAGR_PRIV_07	28	1.2	11.1	5.425	2.7274
VAGR_PRIV_08	28	-5.1	8.1	1.475	3.1964
VAGR_PRIV_09	28	-17.1	1.6	-6.454	4.4002
VAGR CONST 07	28	-6.6	33.9	6.689	8.2954
VAGR_CONST_08	28	-13.8	26.2	.171	8.1718
VAGR_CONST_09	28	-43.3	9.9	-10.279	11.5684
VAGR_FIN_07	28	-1.4	12.7	6.421	3.2422
VAGR_FIN_08	28	-1.7	9.4	2.621	2.6049
VAGR_FIN_09	28	-12.0	7.2	-2.211	3.6913
MKT_INT_07	27	22.70	387.90	75.0222	74.62435
MKT_INT_08	27	22.60	379.00	77.2556	74.02433
	27				
MKT INT 09		21.10	371.40	75.6630	75.08184
LAB_PROD_07 LAB_PROD_08	27 27	3.40	56.30 54.70	24.3481	16.10058
		3.50		24.2519	15.80660
LAB_PROD_09	27	3.40	54.60	23.9556	15.57580
GDP PC 07	27	2700.00	61200.00	19785.1852	13816.56485
GDP_PC_08	27	2900.00	61100.00	19785.1852	13642.34651
GDP PC 09	27	2700.00	57700.00	18674.0741	12906.66472
GDP_PC_GR_08_07	27	05	.07	.0096	.03168
GDP PC GR 08 08	27	18	.01	0607	.04028

Table A12. Geographical proximity – dummy variable (used in the country by country multivariate analyses)

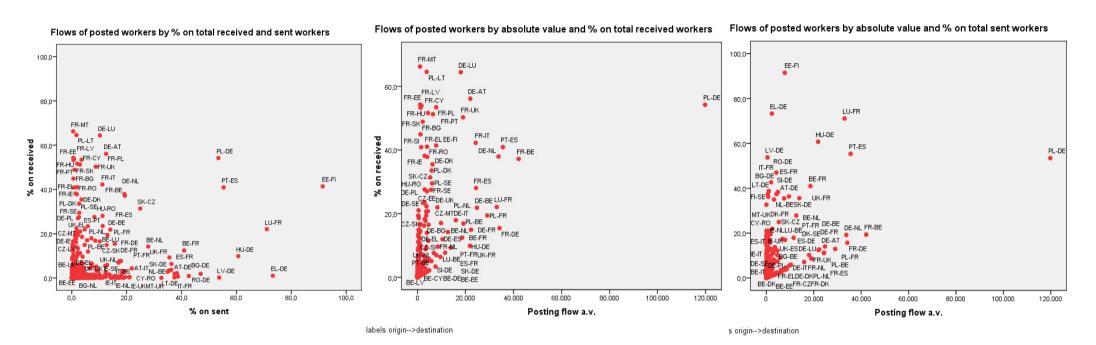
	o=no proximity	1=proximity	Total
Austria	20	6	26
Belgium	22	4	26
Bulgaria	24	2	26
Cyprus	25	1	26
Czech Republic	22	4	26
Denmark	22	4	26
Estonia	23	3	26
Finland	22	4	26
France	21	5	26
Germany	18	8	26
Greece	24	2	26
Hungary	22	4	26
Ireland	25	1	26
Italy	23	3	26
Latvia	22	4	26
Lithuania	22	4	26
Luxembourg	22	4	26
Malta	26	0	26
Netherlands	22	4	26
Poland	20	6	26
Portugal	25	1	26
Romania	24	2	26
Slovakia	22	4	26
Slovenia	23	3	26
Spain	24	2	26
Sweden	20	6	26
United Kingdom	25	1	26

Table A13. Labels and statistics of the variables used in the country by country multivariate analyses

				Statisti	cs		Pearson	ı correlation coef	ficient	Expected sign		
Label	Variable	Min	Max	Sum	Average	Std. Dev.	Posting flow abs. value	Posting flow as % received	Posting flow as % sent	% on received	% on sent	
	Flows ^a											
P_TOT	Posting flow a.v.	0	119779	985172	1403.38	6.230.96	1	0.510**	0.474**	Dependent	Dependent	
P%_REC	Posting flow as % on received	0	66.2	2700	3.846	9.88	0.510**	1	0.230**	Dependent	Dependent	
P_%SEN	Posting flow % on sent	0	91.5	2700	3.846	9.05	0.474**	0.230**	1	Dependent	Dependent	
	Differentials ^a											
LC-TOT_08	Total labour cost (2008)	-32.37	32.37	0	0	15.15	-0.084*	0.116**	-0.206**	+	-	
LC-CONST_08	Construction lab. cost (2008)	-32.67	32.67	0	0	14.55	-0.088*	0.092*	-0.186**	+	-	
LC-SERV_08	Service Labour cost (2008)	-32.2	32.2	0	0	14.80	-0.081*	0.107**	-0.193**	+	-	
LC-FIN_08	Finance Labour cost (2008)	-50.21	50.21	0	0	23.28	-0.089*	0.093*	-0.192**	+	-	
UNR07	Unempl.rate (2007)	-7.96	7.96	0	0	2.81	0.083*	0.204**	-0.105**	-	+	
SIN_ONEMP08	Union membership (2008)	-80.06	80.06	0	0	33.40	-0.065	-0.156**	0.007	1	+	
GDP_PC07	GDP per capita (2007)	-74100	74100	0	0	22.643.90	-0.057	0.014	-0.099**	+	-	
EMPL_GR_AV0507	Empl. Growth (average 2005-07)	-4.61	4.61	0	0	1.80	0.02	-0.135**	0.146**	+	-	
EMPL_GR07	Empl. Growth (2007)	-6.14	6.14	0	0	2.02	0.057	-0.058	0.096*	+	-	
GDP_GR_AV0507	GDP Growth (average 2005-07)	-9.53	9.53	0	0	3.49	0.039	-0.137**	0.191**	+	-	
GDP_GR07	GDP Growth (2007)	-9.7	9.7	0	0	3.67	0.048	-0.127**	0.179**	+	-	
S_CONST_GR07	Construction growth (2007)	-40.49	40.49	0	0	11.77	0.034	-0.083*	0.125**	+	-	
S_FINRE_GR07	Finance and real estate growth (2007)	-14.09	14.09	0	0	4.68	0.068	-0.077*	0.149**	+	-	
MKT_INT_07	Mkt integration service (2007)	-365.19	365.19	0	0	105.60	-0.003	-0.126**	0.101**	+	+	
LAB_PROD_07	Labour productivity (2007)	-52.9	52.9	0	0	22.79	-0.076*	0.100**	-0.192**	+	-	
	Dummy											
GEOG1	Geographic proximity	0	1	92	0.13	0.34	0.304**	0.268**	0.297**	+	-	

a) flows and differentials are calculated in the "origin →destination" direction
** Significant at 0.01 level (2-tails).
*Significant at 0.05 level (2-tails).
Source: Ismeri Europa elaboration

Figure A1 Country by country flows of posted workers in 2007



ANNEX B - A SIMULATION OF FUTURE TRENDS OF POSTING

Under the assumption that nothing changes in the regulatory framework both at EU and national level, it is possible to use a simple model to simulate the expected evolution of posting in the medium term (5 years). The model in based on the evidence that the growth of posting is strongly correlated to the growth of GDP. In addition, the main drivers of posting (unemployment, labour cost, trade union membership and market integration) are mostly correlated to GDP¹⁰. Therefore the growth rate of GDP (GDP_gr) is used as variable which explains the trend of posting.

The model is built from a receiving perspective, starting from data on posting in 2007. The receiving perspective is chosen because the empirical analysis better support this perspective. The use of 2007 data is due to the fact that they seem more reliable compared to data on posting in 2008 and 2009, which have been strongly influenced by the economic crises.

Two trends are simulated. The projection from 2010 to 2015 distinguishes between a hypothesis of constant labour cost differentials and a scenario of labour cost convergence (see Box B2 for a discussion of the labour cost convergence hypothesis).

In order to identify the expected trend of sent postings at country level as well as the country by country breakdown of sent and received posting, the country by country breakdown of 2007 has been replicated¹¹. This approach allows preserving the relevance of the geographical proximity in the country by country flows of posting. The aggregate level of posting at EU-level is the sum of national postings (received and sent).

The simulation is based on the model below:

where:

- Posting $_{t+1,j}$ is the expected value of (received) postings in t+1 in country j,
- Posting_{t, j} is the expected value of (received) postings in t in country j, the first year used for the simulation is the number of actual – and not expected, of course – received postings in 2007.
- $[1+(GD_gr_{t+1,j}*CF_j)]$ is the growth rate factor of posting in country j. This results from the GDP growth rate expected for year t+1 in the country j (source: IMF) and on the corrective factor CF_j specifically calculated for the country j (see the sub-section below).

Tables B3-B5 shows the resulting country by country flows of posting. Given the shortage of data, the model has some methodological limitations. In particular, the growth rate factors of posting (one for each country) are determined according to a number of hypotheses. Therefore results must be interpreted very cautiously. In particular, the extent of postings resulting from the model should be used to foresee a general trend of the phenomenon and not as a precise forecast of the future number of posted workers country by country. Finally, notice that the receiving perspective results in a prudential underestimation of the future extent of the phenomenon.

¹⁰Box B1 discusses the relationship between GDP and labour cost.

[&]quot;Missing data of Romania have been replaced assuming that the total number of posted workers from Romania in 2007 was distributed according to the breakdown emerging from country by country data of 2008. For the UK, the available country by country breakdown represents around the 90% and not the total of postings.

The corrective factor

To calculate the CF of each country the statistic relevance of each driver (unemployment, labour costs, trade union membership and market integration) as emerging from the econometric analysis presented in Section 1 has been taken into account:

- Every country, for each proxy representing a driver, has been included in one of three clusters: i) cluster "high" which includes countries with a relatively high values of the proxy of the driver, ii) cluster "medium" which includes countries with medium values of the proxy, iii) cluster "low" which includes countries with relatively low values of the proxy.
- According to the cluster of inclusion, for each driver, a "driver-corrective factor" has been assigned to every country in order to represent the statistic relevance and the direction of the driver. These driver-corrective factors have been defined according to the empirical evidence:
 - o The sign of weighs is based on the econometric analysis.
 - Unemployment and labour cost are the most statistically significant drivers (see previous section). Therefore, their relevance in relatively higher with respect to market integration and trade union membership.

For instance, since unemployment is a driver which hinders posting from a receiving perspective, countries with high unemployment rate receive a negative driver-corrective factor related to unemployment (-o.2). On the contrary, since high labour cost favours posting inflows, high labour cost countries receive a positive driver-corrective factor related to labour cost (+o.2). Since market integration is a driver which favours posting, a high integration corresponds to a high driver-corrective factor related to market integration. Finally, since trade union membership is a driver which hinders inflows of posting, a high trade union membership is associated a negative driver-corrective factor. Table B1 shows the values of the driver-corrective factors (a. tod.) by driver and cluster.

Table B1. Driver-corrective factors by driver and cluster

Tubic Bil Biller Co	,	ceric factors by		er and crast			
Driver corrective factors			Econ	omic drivers		Soc	ial-institutional drivers
	a.	Unemployment	d.	Trade union memb.			
Cluster "high"		-0.2		+0.2	+0.2		-0.1
Cluster "medium		0		0	+0.1		0
Cluster "low"		+0.2		-0.2	0		+0.1

Given the driver-corrective factors described above, the CF is calculated by adding to 1 the sum of the drivers corrective factors (1+a+b+c+d). This means that, without any driver corrective factor, the trend of posting exactly follows the trend of GDP. Table B2 shows the CF of each country.

Example: According to the empirical evidence, Belgium belongs to the clusters "medium" for unemployment rate and market integration while to the clusters "high" for labour cost and trade union membership. Therefore Belgium received for unemployment a.=0, for labour cost b.=+0.2, for market integration c.=+0.1, for trade union membership d.=-0.1.

To carry out the trend simulation under the hypothesis of labour cost convergence, CF_j changes over the period 2010-2015 because the relevance of the driver of labour cost becomes smaller year by year (see Table B2). This progressively reduces the relative convenience of a number of phenomena such as posting driven by labour cost and firm delocalization.

Results

The main results of the simulation can be summarised as follows:

- Given the current regulatory setting, posting will increase following the economic cycle.
 Posting continues to follow a cyclical pattern and keeps similar features in terms of level, drivers and structure.
- The potential convergence of labour cost reduces the convenience of the posting of low skilled workers resulting in a smaller growth rate of posting. In case of labour cost convergence, the reduction in the role of differentials in labour cost as a driver of posting leads to increase the relative weigh of postings which are driven by skill and labour shortages, job opportunities, internationalisation and market integration.
- In both cases (with and without labour cost convergence), postings grows, but at a slow pace (slightly lower than GDP growth), and remains an economic phenomenon of limited significance at aggregate level.
- The country breakdown of the simulation shows that Germany, France, Poland, Portugal, Belgium and Luxembourg continue to be countries which send the most relevant number of postings and Germany, France, Belgium, Spain, Italy and the Netherland remain the most relevant recipients of postings (see Figure 4.2 and Table B2).
- The simulation on the inflows-outflows detailed country by country (see Table B3 and Table B4) confirms that posting does not change substantially in terms of relative extent and features. Therefore, we can conclude that the limited critical issues related to the posting continue to characterise a restricted number of high labour cost countries which receive a relatively high number of posted workers driven by the differences in labour cost. With converging labour cost, the relevance of these critical issues becomes even more limited.

Table B2. Corrective factor, by country, with and without labour cost convergence

	Dri	iver correcti	ve factors	:	CF without labour cost convergence.		CF wi	th labour co	ost converg	ence	
	a.	b.	c.	d.		2010	2011	2012	2013	2014	2015
BE	0	0.2	0.1	-0.1	1.2	1.2	1.15	1.1	1.05	1	1
BG	0	-0.2	0.1	0.1	1	1	1.05	1.1	1.15	1.2	1.2
CZ	0	-0.2	0.1	0.1	1	1	1.05	1.1	1.15	1.2	1.2
DK	0.2	0.2	0.1	-0.1	1.4	1.4	1.35	1.3	1.25	1.2	1.2
DE	-0.2	0.2	0	0	1	1	0.95	0.9	0.85	0.8	0.8
EE	-0.2	-0.2	0.1	0.1	0.8	0.8	0.85	0.9	0.95	1	1
IE	0	0.2	0.2	0	1.4	1.4	1.35	1.3	1.25	1.2	1.2
EL	-0.2	0	0	0.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9
ES	-0.2	0	0	0.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9
FR	-0.2	0.2	0	0.1	1.1	1.1	1.05	1	0.95	0.9	0.9
IT	0	0.2	0	-0.1	1.1	1.1	1.05	1	0.95	0.9	0.9
CY	0.2	0	0.2	-0.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3
LV	-0.2	-0.2	0	0.1	0.7	0.7	0.75	0.8	0.85	0.9	0.9
LT	0	-0.2	0	0.1	0.9	0.9	0.95	1	1.05	1.1	1.1
LU	0.2	0.2	0.2	-0.1	1.5	1.5	1.45	1.4	1.35	1.3	1.3
HU	-0.2	-0.2	0.1	0.1	0.8	0.8	0.85	0.9	0.95	1	1
MT	0	0	0.2	-0.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
NL	0.2	0.2	0.1	0	1.5	1.5	1.45	1.4	1.35	1.3	1.3
AT	0.2	0.2	0.1	0	1.5	1.5	1.45	1.4	1.35	1.3	1.3
PL	-0.2	-0.2	0	0.1	0.7	0.7	0.75	0.8	0.85	0.9	0.9
PT	-0.2	0	0	0.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9
RO	0	-0.2	0	0	0.8	0.8	0.85	0.9	0.95	1	1
SI	0	0	0.1	0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
SK	-0.2	-0.2	0.1	0.1	0.8	0.8	0.85	0.9	0.95	1	1
FI	0	0.2	0	-0.1	1.1	1.1	1.05	1	0.95	0.9	0.9
SE	0	0.2	0.1	-0.1	1.2	1.2	1.15	1.1	1.05	1	1
UK	0	0	0	0	1	1	1	1	1	1	1

Table B3. Simulation of the number of postings from and to EU27 (year 2010-2015)

		Posting	g by sending co	ountry - Simul	ation			Posting	by receiving o	country - Simu	ılation	
Country	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
AT	11,505	11,738	12,038	12,345	12,652	12,942	40,083	40,872	41,733	42,625	43,568	44,518
BE	46,260	47,271	48,382	49,568	50,822	52,082	114,972	117,335	119,663	122,183	124,894	127,792
BG	4,739	4,830	4,943	5,061	5,179	5,289	2,800	2,867	3,005	3,149	3,338	3,538
CY	143	146	152	157	163	169	2,381	2,433	2,507	2,594	2,685	2,781
CZ	14,244	14,577	15,012	15,488	15,991	16,508	16,988	17,437	18,178	18,932	19,717	20,537
DE	179,279	183,244	187,722	192,513	197,561	202,738	224,138	229,577	235,142	240,337	245,156	248,904
DK	3,774	3,845	3,942	4,054	4,171	4,291	18,149	18,653	19,142	19,620	20,080	20,546
EE	8,723	8,931	9,141	9,357	9,579	9,795	2,088	2,176	2,264	2,354	2,445	2,536
EL	3,224	3,298	3,377	3,454	3,529	3,593	9,307	9,013	9,131	9,365	9,601	9,909
ES	26,526	27,009	27,604	28,257	28,944	29,629	86,158	86,915	88,779	91,031	93,359	95,610
FI	2,146	2,196	2,259	2,331	2,404	2,478	19,260	19,714	20,163	20,623	21,093	21,549
FR	219,795	224,245	229,859	235,909	242,168	248,457	151,168	154,158	157,493	161,216	165,269	169,353
HU	36,377	37,207	38,189	39,157	40,112	40,977	8,302	8,504	8,812	9,131	9,462	9,802
IE	957	978	1,003	1,029	1,058	1,086	7,723	7,934	8,167	8,452	8,777	9,144
IT	2,687	2,738	2,807	2,883	2,963	3,043	56,302	56,979	57,936	58,885	59,832	60,736
LI	1,657	1,696	1,738	1,780	1,823	1,863	5,974	6,197	6,388	6,643	6,928	7,223
LT	913	935	959	983	1,006	1,027	2,982	3,102	3,250	3,407	3,571	3,741
LU	47,008	47,958	48,996	50,134	51,356	52,584	29,245	30,344	31,433	32,481	33,556	34,622
MT	102	105	107	110	114	117	1,664	1,697	1,737	1,785	1,838	1,894
NL	9,299	9,484	9,705	9,940	10,186	10,432	91,082	92,912	94,774	96,779	98,931	101,180
PL	227,672	232,932	238,524	244,183	249,809	254,943	14,853	15,512	16,244	17,064	17,943	18,862
PT	64,345	65,241	66,634	68,235	69,908	71,556	12,706	12,698	12,790	12,959	13,145	13,335
RO	9,078	9,258	9,469	9,681	9,891	10,081	10,585	10,779	11,354	11,931	12,539	13,177
SE	3,503	3,557	3,640	3,734	3,830	3,926	21,724	22,391	23,197	24,171	25,157	26,184
SI	12,908	13,178	13,478	13,782	14,087	14,374	3,838	3,946	4,086	4,243	4,383	4,516
SK	21,366	21,857	22,475	23,102	23,737	24,352	4,562	4,797	5,048	5,309	5,579	5,863
UK	39,354	39,973	40,829	41,795	42,817	43,859	38,550	39,484	40,566	41,753	43,011	44,343
Total	997,585	1,018,428	1,042,983	1,069,022	1,095,858	1,122,193	997,585	1,018,428	1,042,983	1,069,022	1,095,858	1,122,193

Simulation elaborated by Ismeri Europa. Simulation is carried out without assuming labour cost convergence. The receiving perspective generally underestimates the extent of the phenomenon

Table B4. Simulation of the number of postings from and to EU27 country by country (year 2010)

	FROM																											
TO	AT I	BE E	G C	Y (Z I	DE I	K E	EE E	EL E	ES I	T F	R I	HU I	E ľ	ΓΙ	Т 1	LU L	V M	1 T	NL I	PL I	PT F	o s	E 5	SI S	sk t	JK	Tot.
AT	0	305	48	2	659	22497	159	9	7	152	46	4598	2663	7	61	8	485	6	0	186	3759	867	93	45	1258	959	1204	40083
BE	343	0	439	1	668	25121	65	95	104	1224	139	42768	1746	82	146	30	8011	51	1	3266	19417	5869	562	223	1692	1444	1465	114972
BG	43	73	0	0	520	417	41	4	14	78	27	1258	14	0	7	0	3	0	0	43	62	0	14	59	11	0	113	2800
CY	6	20	8	0	317	33	23	0	44	52	3	1269	0	0	4	0	5	0	5	3	5	0	20	72	0	35	457	2381
CZ	280	230	18	21	0	2755	18	1	1	393	12	3789	289	6	35	0	28	4	0	181	3106	39	103	45	109	5332	193	16988
DE	4346	3587	2034	1	883	0	221	103	2362	3662	371	34630	22135	41	270	619	3118	489	6	1555	121492	2548	4301	501	4959	7585	2321	224138
DK	57	123	61	0	560	6441	0	50	21	113	19	3751	1	12	3	157	39	50	0	31	6093	37	6	192	99	15	219	18149
EE	18	12	0	0	439	179	3	0	0	2	60	1134	104	0	1	39	6	5	0	6	58	0	0	13	0	0	9	2088
EL	164	162	172	9	524	980	180	2	0	233	72	3820	52	1	71	2	28	1	1	118	57	9	88	300	1	84	2177	9307
ES	785	1053	401	0	594	10302	357	12	20	0	167	24185	432	8	423	120	169	25	3	636	4402	35256	609	520	608	351	4722	86158
FI	69	85	8	0	562	1441	45	7977	0	117	0	3414	182	1	20	304	23	64	0	51	3741	219	6	140	263	334	196	19260
FR	417	18835	415	0	714	22597	792	54	254	9668	94	0	1808	162	1043	234	33384	59	1	1472	29389	11651	855	502	505	2189	14073	151168
HU	344	175	15	15	559	1201	17	2	17	170	15	4286	0	3	34	0	139	0	0	24	500	6	170	29	20	413	149	8302
ΙE	52	102	3	0	520	1289	10	2	0	392	17	2946	135	0	12	0	80	0	18	41	943	282	0	29	19	39	794	7723
IT	2458	1163	465	0	653	9610	218	5	44	3327	78	23785	1214	104	0	1	234	12	17	558	2818	2108	1725	232	1545	1013	2913	56302
LT	22	59	3	0	339	561	30	14	0	34	10	986	9	0	6	0	3	16	0	9	3857	0	0	6	2	3	2	5974
LU	58	4825	2	0	465	18847	1	1	12	45	1	4083	239	0	42	1	0	0	17	119	276	108	4	14	3	6	76	29245
LV	23	7	0	0	330	135	11	43	0	97	8	1607	153	0	2	55	8	0	0	12	382	0	60	14	15	0	22	2982
MT	2	12	0	0	323	27	22	0	0	44	5	1102	12	0	26	0	1	0	0	11	2	0	0	11	0	0	62	1664
NL	334	12957	290	11	633	34567	102	13	264	660	23	8773	983	180	78	45	735	16	0	0	16347	4815	307	124	1136	733	6955	91082
PL	132	285	109	0	621	4017	81	11	3	586	15	7937	91	30	65	1	62	3	0	42	0	53	60	72	190	180	208	14853
PT	30	293	15	0	530	1202	185	1	7	2983	37	6513	9	4	13	0	36	0	0	27	148	0	8	113	36	2	511	12706
RO	484	127	84	30	534	916	8	0	25	356	9	4006	2920	1	111	0	27	0	0	218	471	28	0	20	73	0	139	10585
SE	172	308	91	0	590	4520	720	313	1	251	801	5973	350	122	25	24	40	65	0	87	6405	169	52	0	84	274	285	21724
SI	235	31	8	26	431	526	2	0	0	52	5	1570	36	0	28	0	115	0	0	42	351	0	0	109	0	247	21	3838
SK	225	97	7	0	684	627	7	0	0	98	6	2230	255	4	30	0	9	1	0	9	175	0	1	5	23	0	67	4562
UK	405	1334	44	28	590	8471	456	10	25	1734	106	19383	544	188	128	17	221	47	34	552	3415	282	33	116	258	128	0	38550
Tot.	11505	46260	4739	143	14244	179279	3774	8723	3224	26526	2146	219795	36377	957	2687	1657	47008	913	102	9299	227672	64345	9078	3503	12908	21366	39354	

Table B5. Simulation of the number of postings from and to EU27 country by country (year 2015)

	FROM																										\neg	
то	AT	BE I	BG C	CY C	CZ	DE I	OK E	EE E	EL I	ES I	T F	FR	HU I	IE I	T I	.Т 1	LU I	.V M	T I	NL I	PL I	PT F	RO S	SE S	SI S	sk t	UK	Tot
AT	0	338	53	2	731	24,987	176	10	8	169	51	5,106	2,958	8	68	9	538	7	0	207	4,175	963	103	50	1,397	1,065	1,337	44,518
BE	381	0	487	1	742	27,922	72	106	115	1,361	155	47,537	1,941	91	162	34	8,904	56	1	3,630	21,582	6,523	625	248	1,881	1,605	1,628	127,792
BG	54	92	0	0	658	526	52	5	18	98	34	1,589	18	0	9	0	4	0	0	54	78	0	18	74	14	0	143	3,538
CY	7	23	9	0	371	38	27	0	51	61	3	1,482	0	0	5	0	6	0	6	3	6	0	23	84	0	41	534	2,781
CZ	338	278	22	26	0	3,330	22	1	1	475	15	4,581	349	7	43	0	34	5	0	218	3,754	47	125	54	131	6,446	233	20,537
DE	4,826	3,983	2,258	1	981	0	246	115	2,623	4,066	412	38,456	24,581	45	300	687	3,462	543	7	1,727	134,915	2,829	4,776	556	5,507	8,423	2,577	248,904
DK	64	139	69	0	634	7,292	0	56	23	128	21	4,247	1	14	4	177	44	56	0	35	6,897	42	7	217	112	18	248	20,546
EE	22	15	0	0	533	217	4	0	0	2	73	1,377	126	0	1	47	7	6	0	7	70	0	0	16	0	0	11	2,536
EL	174	172	183	9	558	1,044	192	2	0	248	77	4,067	55	1	75	2	30	1	1	125	61	9	94	319	1	90	2,318	9,909
ES	871	1,169	445	0	659	11,432	396	13	22	0	185	26,838	480	9	470	133	187	28	3	705	4,885	39,124	676	577	674	390	5,240	95,610
FI	77	95	9	0	628	1,612	51	8,925	0	131	0	3,820	203	1	22	340	25	71	0	57	4,185	245	7	156	294	373	219	21,549
FR	467	21,100	465	0	800	25,315	888	60	285	10,831	105	0	2,026	181	1,169	262	37,400	66	1	1,650	32,925	13,052	958	562	566	2,452	15,766	169,353
HU	406	207	17	17	660	1,418	20	2	20	201	17	5,061	0	3	41	0	164	0	0	28	591	7	201	34	23	487	176	9,802
ΙE	61	120	4	0	616	1,526	12	2	0	464	20	3,488	159	0	14	0	94	0	21	48	1,116	334	0	34	22	46	940	9,144
IT	2,652	1,255	502	0	705	10,366	235	5	48	3,589	85	25,659	1,310	112	0	1	253	13	18	602	3,040	2,274	1,860	250	1,667	1,093	3,143	60,736
LT	27	71	4	0	410	679	37	17	0	42	12	1,193	11	0	7	0	4	20	0	11	4,664	0	0	7	2	4	2	7,223
LU	68	5,712	2	0	551	22,312	1	1	14	53	1	4,834	283	0	50	1	0	0	20	141	327	128	5	16	4	7	90	34,622
LV	29	9	0	0	414	170	13	54	0	122	10	2,015	192	0	2	68	10	0	0	15	479	0	76	17	18	0	28	3,741
MT	2	14	0	0	367	31	25	0	0	50	6	1,254	14	0	30	0	1	0	0	13	2	0	0	13	0	0	71	1,894
NL	371	14,393	322	13	703	38,399	114	15	294	733	25	9,746	1,091	200	86	50	816	18	0	0	18,159	5,349	341	138	1,262	814	7,726	101,180
PL	167	362	139	0	788	5,101	102	14	4	744	19	10,078	115	38	83	1	79	4	0	53	0	67	76	92	241	228	264	18,862
PT	32	307	16	0	556	1,262	194	1	7	3,131	39	6,835	10	4	14	0	38	0	0	29	156	0	8	119	38	2	536	13,335
RO	603	158	104	37	664	1,140	10	0	31	443	11	4,986	3,635	1	139	0	33	0	0	271	586	34	0	25	91	0	173	13,177
SE	207	371	109	0	711	5,448	867	378	1	303	965	7,199	422	148	31	29	48	79	0	104	7,721	204	62	0	102	331	343	26,184
SI	277	37	10	31	507	619	2	0	0	62	6	1,847	43	0	33	0	135	0	0	50	413	0	0	128	0	291	25	4,516
SK	289	125	9	0	879	806	9	0	0	126	8	2,866	328	5	39	0	12	1	0	12	224	0	1	7	29	0	86	5,863
UK	466	1,535	51	32	679	9,744	525	12	28	1,995	122	22,296	626	216	147	20	254	54	39	635	3,929	325	38	133	296	147	0	44,343
Tot	12,942	52,082	5,289	169	16,508	202,738	4,291	9,795	3,593	29,629	2,478	248,457	40,977	1,086	3,043	1,863	52,584	1,027	117	10,432	254,943	71,556	10,081	3,926	14,374	24,352	43,859	

BOX B1. The dynamics of wages, labour costs and GDP in Europe

The relation between labour costs and GDP growth stems from the interplay between product and labour markets.

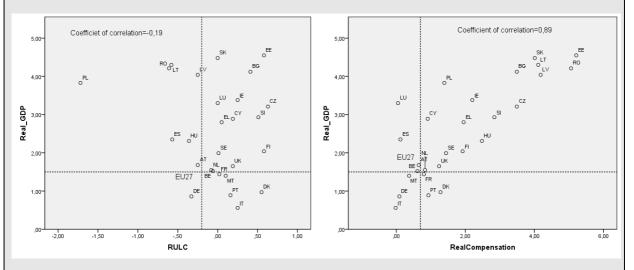
Table B1.1 shows the GDP and the main indicators of labour markets in Europe.

Table B1.1. GDP and labour cost and compensation in Europe.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
European Union (27 countries)											
Real GDP	3,9	2,0	1,3	1,3	2,5	2,0	3,2	2,9	0,7	-4,2	1,0
Price deflator GDP	3,2	2,1	2,5	0,3	2,4	2,3	2,4	2,9	0,4	-1,5	1,1
Nominal compensation per employee	5,9	3,3	2,9	1,0	2,7	2,6	2,6	3,3	0,7	-1,3	2,2
Real compensation per employee (GDP deflator)	2,6	1,1	0,4	0,7	0,3	0,4	0,3	0,4	0,3	0,2	1,1
Nominal unit labour costs	3,5	2,2	2,0	0,0	0,8	1,6	1,1	2,1	0,9	1,2	0,2
Real unit labour costs	0,3	0,1	-0,4	-0,3	-1,5	-0,6	-1,2	-0,7	0,5	2,7	-0,8
European Union (15 countries)											
Real GDP	3,9	1,9	1,2	1,2	2,3	1,8	3,0	2,7	0,5	-4,3	0,9
Price deflator GDP	2,9	1,7	2,4	0,6	2,3	1,8	2,1	2,4	-0,3	-0,9	1,0
Nominal compensation per employee	4,9	2,4	2,6	1,0	2,9	2,1	2,7	2,9	0,0	-0,7	1,8
Real compensation per employee (GDP deflator)	2,0	0,7	0,1	0,4	0,6	0,3	0,5	0,5	0,3	0,2	0,8
Nominal unit labour costs	3,2	1,9	2,1	0,3	1,3	1,3	1,2	1,8	0,3	1,8	-0,1
Real unit labour costs	0,3	0,2	-0,3	-0,3	-1,0	-0,5	-0,9	-0,5	0,6	2,8	-1,1
Source: Macro Economic Indicators - Employmen	t in Eur	ope 201	10								

We would generally expect an inverse relationship between unit labour cost and real GDP: as national output expands and the economy heads towards full capacity, supply bottlenecks and shortages may start to appear. Workers require payment of overtime and bonuses to work longer hours and will ask wage increases, furthermore as national output expands, older less productive machinery may be used and less efficient workers hired. Higher wage rates without any compensating increase in labour productivity mean that unit costs of production rise, leading businesses to produce less. The empirical evidence across the EU27 countries shows that, while the relation between real GDP growth and real unit labour cost is negative, the correlation between (real) compensation per employees and GDP is strongly positive.

Figure B1.1. The relationship between real GDP, RULC and real compensation



In the long run output may increase only with increases in: labour supply; labour and capital productivity; the capital stock, business efficiency; innovation. In dynamic terms the relevant variables is wage flexibility (real and nominal), i.e. the speed at which real or nominal wages adjust to real or nominal shocks (productivity shocks, or changed market conditions, including changes in the terms of trade).

In recent years intensified competitive pressures have increased the pace of structural change in many economies and required a greater capacity to rapidly adapt to structural changes including, among other things, greater wage flexibility. Wage flexibility depends on structural features of the labour market, industrial relation systems and taxation systems:

- Factors increasing employees' bargaining power in wage setting, like high minimum wages, strict work rules or extensive employment protection, *erga omnes* provisions for mandatory collective bargaining.
- Factors improving the fall-back options of employees, as high level and duration of unemployment benefits and other welfare payments or by loosening the standards for receiving such benefits.
- The degree of centralization and coordination of wage setting is also an important factor. Very high (national) or very low (plant level) centralization of wage setting generate less wage pressure than intermediate levels (sector) (Calmfors and Driffill, 1988). Coordination induces unions and employers organisations to internalize the negative effects of higher wages and thus to moderate wage increases. Multiple bargaining levels that set floors but not caps on wage increases tend, instead, to increase wage pressure (Blanchard et al., 1995).
- High tax wedges between workers' marginal productivity and their take home pay also reduce wage flexibility.

 The literature usually considers two different dimensions of wage adjustment mechanisms:
- Nominal wage and price flexibility in responding to country-specific aggregate demand shocks,
- Real wage flexibility to align real wages to productivity developments at the regional, sectoral and occupational levels.

World-wide shocks produce different effects on the labour markets on the basis of the institutional mix of each specific country. Some institutions may reduce/prolong the effects of shocks on unemployment. For example, a high level of wage bargaining coordination may lead to a faster adjustment of real wages in presence of a reduction in productivity growth. By contrast, if labour market institutions affect negatively unemployment duration, adverse shocks are more likely to increase the pool of long-term unemployed, thus reducing the pressure of unemployment on wages. Empirical evidence shows that a model that allows economic shocks and institutions to interact can explain both much of the rise and much of the heterogeneity in the evolution of unemployment in Europe (Blanchard and Wolfer, 2000).

In recent years both common macroeconomic shocks and country specific ones have tested the flexibility of the wage formation mechanism in the euro area. There is a substantial agreement in the ample literature on unemployment in Europe and on its causes: negative supply shocks were worsened by an institutional setting which amplified and protracted their negative effects.

According to most commentators, EMU has increased the need for wage flexibility and labour mobility in order to support adjustment processes among territorial areas with very different economic and social structures (Buti-Sapir, 2000). Given current large differences among member states and regions and the still low labour mobility, both within and among member states/regions, wage flexibility is an important factor to cushion the impact of asymmetric shocks (Bertola, Boeri, Nicoletti, 2001).

Price transparency should increase both cross-country arbitrage by consumers and competitive pressures which should increase reform pressures. EMU and economic integration should also impose more discipline on wage setters (Dunthine and Hunts, 1994) and national policy makers (Bean, 1998; Burda, 1999), thus increasing the pressure for structural labour and product market reform at the national level. However, other authors (Calmfors, 1998; Sibert and Sutherland, 1997; Cukierman and Lippi, 1999) underline the risk that EMU will lower such pressures. Wage bargaining may be characterised by a "wage catching up" process due to greater wage and price transparency. Moreover, unions and national authorities may adopt "free-rider" behaviour in a situation where it

is the overall European inflation and unemployment which are considered by the ECB in defining monetary policy. Finally, the restrictive stance that the ECB has to adopt in order to assert its credibility and the Fiscal and Stabilisation Pact do not consent to create the positive macroeconomic conditions which are considered necessary in order to permit the adoption of structural reforms in the labour market without social conflict.

A stronger pressure for convergence in national wage and social policies will however be exerted by economic forces and the monetary integration process. In fact, the potential for divergent wage policies will be reduced by higher product market competition and converging prices. Moreover, spontaneous convergence will be led by multi-national firms, which will adopt common human resources management policies (Brittan, 1994), and by capital and labour mobility. This convergence process will be supported by institutional competition. Industrial relations systems are already showing signs of convergence across Europe and European integration by itself will reduce the degree of corporatism and centralisation in wage bargaining (Danthine and Hunt, 1994; from an industrial relations perspective: Streeck, 1992).

Indeed in the period ending before the current crisis, "for the euro area as a whole the overall wage discipline has been preserved with no evident signs of second round wage effects. Nominal wage growth per worker has been remarkably stable since the beginning of EMU" (Arpaia, 2007), however European countries show persistent cross-country differences in wage and labour costs developments which do not reflect differences in productivity and thus indicate insufficient degree of wage flexibility which ultimately may affect growth potential. The reaction to the 2008 crisis has shown an adjustment in the compensation per employee, led by a fall in the variable component together with an increase in nominal unit labour costs due to labour hoarding (Arpaia, Curci 2010).

BOX B2. Economic integration and labour cost convergence in Europe

In open economies, labour costs and wage differentials are among the main factors firms consider in deciding to locate in or move out of regional clusters of economic activities and to employ the local workers or workers from other lower wage regions. To assess future trends in the posting of workers it is then necessary to see if we may expect a convergence in wages and labour costs across European countries and regions.

According to neoclassical trade theory free trade in goods and services and factor mobility should be strong drivers for factor price convergence among countries resulting in the equalization of factors returns across countries and in factor price equalization in the long run. Simply stated the theorem says that when the prices of the output goods are equalized between countries as they move to free trade, then the prices of the factors (capital and labour) will also be equalized between countries. This implies that free trade will equalize the wages of workers and the rents earned on capital throughout the world. The theorem derives from the assumptions of the model, the most critical of which is the assumption that the two countries share the same production technology and that markets are perfectly competitive. The more recent models on outsourcing for cross-country wage differentials (Deardoff, 2011) have complemented this model.

The process of factor price convergence should be stronger and faster in optimum currency areas^a, as the EMU^b, where the elimination of barriers to free trade and factor mobility, is expected to increase pressures on labour costs of participating countries to be in line with their productivity performance and accelerate the convergence of factor prices. There is indeed empirical evidence that removing impediments to trade (as with the creation of a free trade zone, a custom union and a common market) and sharing a single is a strong driver for deeper trade and overall integration. However the empirical evidence also shows that the heterogeneity of policy preferences, institutions and economic structures diminish only gradually.

Factor price convergence in the long run is also modelled in *growth models*. Barro and Sala-i-Martin (1992; 1995) introduced the concept of β -convergence, occurring in any dynamic adjustment process across countries or

regions. There is β -convergence in the cross-section of EU countries or regions if the price of labour in low-wage regions tends to grow faster than the one in high wage regions. The process of β -convergence thus requires a negative relation between the growth rate of a variable and its initial level. According to neoclassical growth models, in a long run perfectly competitive equilibrium growth in real labour costs should equate growth in labour productivity in every country so that growth differential in real unit labour costs should converge toward zero. Combining these models it is possible to detect the following drivers for convergence in factor prices: i) Free trade, ii) Cross-border outsourcing, iii) Interregional labour mobility.

The empirical evidence shows however a mixed picture on labour costs convergence in Europe. Abraham (2001), combining the data sets for the manufacturing sector from the OECD and the US Bureau of Labour Statistics (covering the period 1975-1998 for all OECD countries and going back to 1960 for a small group of OECD countries), detects an overall convergence between countries with higher and lower labour cost. But the process is slow and often partial, so that cost-based advantages may in specific cases survive in the short and sometimes even the medium run. Convergence is more pronounced when the gap in labour costs between countries is larger. Productivity growth is the main factor explaining labour cost convergence: to a significant extent labour cost differentials reflect productivity differentials, so that differentials in unit labour costs are lower than differential in total labour costs per worker or per hour. However, not all the labour cost differentials can be explained by productivity differential. Even if in the EU15 there is a close relation between productivity and labour costs, productivity does not offset labour cost differentials.

Using unit labour cost (ULC) data from the Lander, Dullien and Fritsche (2007) investigate inflation convergence and do not reject the hypothesis of convergence of ULC growth in the EMU, although for some countries there is evidence of relative rather than absolute convergence (Greece, Italy and Portugal present permanently higher rates of ULC increases relative to other EMU countries). Furthermore, country deviations from the rest of the currency union are more pronounced and persistent in Europe. Lebrun and Perez (2011) also show that nominal and real unit labour costs growth differentials between euro area members have persisted since the introduction of the EMU and even widened out until the crisis, because of divergent evolutions in capital-output ratios, nominal effective exchange rates and country-specific institutional features, coupled with an increased sensitivity of real unit labour costs to fundamentals following the shift in the monetary regime. While technological factors result as the main drivers of real unit labour costs growth differentials, differences in product and labour market regulations^c tend to amplify the dispersion, impairing convergence in real unit labour costs. Arpaia and Pichelmann (2007) find out that persistent cross-country differences in wages and labour cost development in the Euro area are indicative of an eventually insufficient degree of nominal and real wage flexibility in the euro area.

Very interesting for the purpose of this study is a recent paper by Šlander and Ogorevc (2010), examining spatial dispersion and the process of β -convergence of labour costs across NUTS2 EU regions in the period 1996-2006.

They find absolute β -convergence in real labour cost across the EU regions' labour markets the period 1996-2006, with real labour costs growing faster in low-wage regions relative to high wage ones. This can be attributed to international trade, cross border outsourcing of production and interregional labour mobility. A faster pace of convergence is found in nominal labour costs, one of the main factors companies consider when deciding production location (3.3% per year relative to 1.9% per annum for real labour costs). The estimated model also reveals a conditional convergence after accounting for productivity growth and other factors: the gaps in nominal wages and real labour costs between high- and low wage regions are slowly narrowing, even after controlling for their different productivity growth rates. These results suggest that in low-wage regions labour costs increase at a higher rate than their productivity growth, and this may reduce their competitive position relative to high wage regions. Another interesting result of the model is that interdependency in wage growth emerges in neighbouring

regions: "a region's wage growth directly affect the growth of wages in the neighbouring region through a positive and significant lambda coefficient" (pg.43).

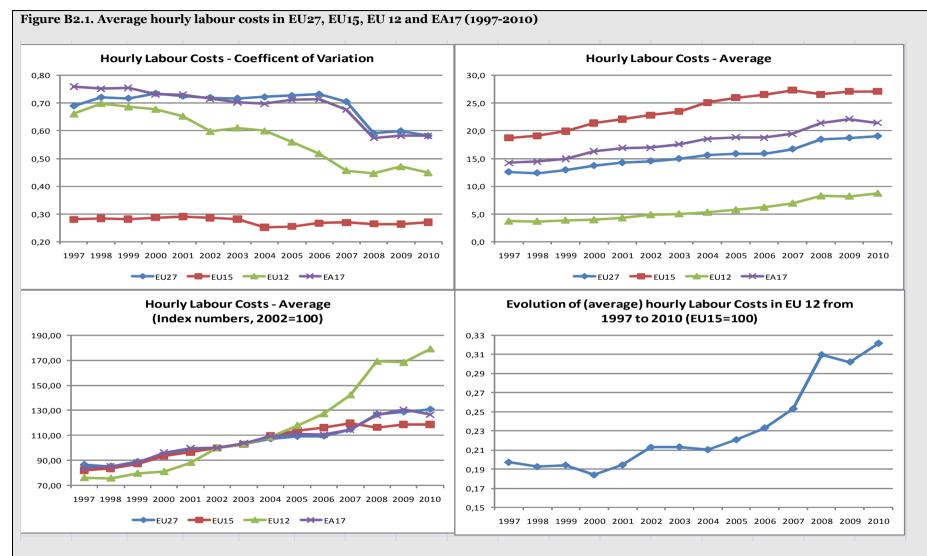
Finally, using the average hourly labour costs^d data related to EU Member States Eurostat it is possible to compute a measure of dispersion (i.e. the coefficient of variation^e) of labour costs for (un-weighted) EU27, EA17 (Euro Area), EU15 averages as well as for the EU12 (i.e. for the Member States which accessed the EU in successive phases), in the period 1997-2010, in order to verify -- in a descriptive way -- if hourly labour costs converge across Europe (Figure B2.1).

Hourly labour costs dispersion shows a decreasing trend in EU27, EA17 and EU12, more pronounced in EU12 and stable in EU15. Therefore it seems to be evidence of very slow "labour costs converging process" between the EU12 and EU15 countries.

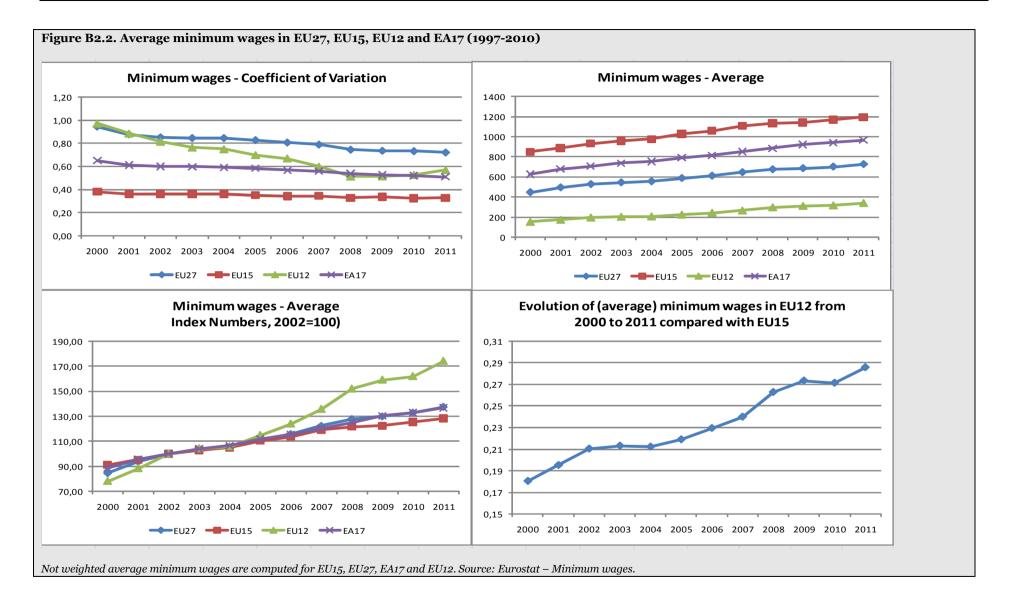
A similar pattern is found considering national minimum wages (monthly national minimum wages)^f. Minimum wages are less dispersed in EU12 respect to EU27, EU15 and EA17 and the latest accession EU countries are slowly closing the gap with EU15 countries (Figure B2.2).

Notes

- ^a The OCA properties include: the mobility of labour and other factors of production, price and wage flexibility, economic openness, and diversification in production and consumption, similarity in inflation rates, fiscal integration and political integration. The similarity of shock and correlation of incomes was added later.
- ^b According to many authors the EMU cannot be considered a real OCA, as it does not comply to all the requirement for a OCA: i) The core group of EU countries are broadly similar (Germany + France + Netherlands), but peripheral countries have big structural differences; ii) Response to interest rate changes varies across Countries; iii) there are still barriers to the mobility of labour. The recent economic and financial turmoil has exposed weaknesses in the currency union.
- ^c The labour market indicators include indicators of workers' bargaining strength in wage formation (bargaining centralization, the replacement of unemployment benefits and the degree of openness of the economy) and of employment protection. In addition the OECD indicator of product market regulation is considered.
- ^d Average hourly labour costs, defined as total labour costs divided by the corresponding number of hours worked. http://epp.eurostat.ec.europa.eu/portal/page/portal/labour market/labour costs/main tables
- ^e The coefficient of variation (CV) is defined as the ratio of the standard deviation to the mean. The coefficient of variation is a dimensionless number ranging from zero to one.
- f Minimum wage statistics published by Eurostat refer to monthly national minimum wages. In some countries the basic national minimum wage is not fixed at a monthly rate but at an hourly or weekly rate. For these countries the hourly or weekly rates are converted into monthly rates. The national minimum wage is enforced by law, often after consultation with the social partners, or directly by national inter-sectoral agreement (this is the case in Belgium and Greece). The national minimum wage usually applies to all employees, or at least to a large majority of employees in the country. Minimum wages are gross amounts, that is, before deduction of income tax and social security contributions. Such deductions vary from country to country (http://epp.eurostat.ec.europa.eu/portal/page/portal/labour_market/earnings/main_tables).



Not weighted average hourly labour costs are computed for EU15, EU27, EA17 and EU12. Source: 1997 - 2007 Eurostat - Labour Cost Annual Data (Average hourly labour costs, defined as total labour costs divided by the corresponding number of hours worked); 2008 Eurostat Labour Cost Survey 2008 (Labour cost per hour in the business economy); 2009 and 2010 Eurostat Estimations (Labour cost per hour in the business economy.



ANNEX C - MONITORING TOOLS: RUT-REGISTER AND LIMOSA

The RUT Register - Denmark

The RUT Register (Register on foreign-service providers and posted workers) was introduced in 2008 in Denmark. It was implemented as a follow up to the successive phasing out of the Danish transitional arrangement concerning individual labour mobility from the new East- and Central European MSs.

It was intended to replace the poorly functioning systems of registration previously existing in order to effectively monitoring the EU-enlargement's effect on the Danish national labour market and its model which is based on relatively high union organisations rate for workers (around 70 % of workers.) and even higher coverage of the social partners independently negotiated collective agreements (above 80 % of all employees).

From time of the enlargement, the political system and the actors of labour market were concerned that the Danish social partners would not be able to integrate the incoming foreign labour force in the Danish autonomous labour market system through union membership and the inclusion of foreign service providers into Danish collective agreements. While in 2008 it was the general notion that individual labour migrants were successfully integrated in the system, foreign providers of services and their posted workers were only modestly being included. Therefore, a broad majority in Danish parliament decided to support a more active approach and intensified efforts of the relevant public authorities in monitoring the phenomenon of posting to counteract illicit comparative advantages for foreign providers of services exploiting the possibility to circumvent national mandatory rules and general public as well as labour market obligations collectively agreed.

With the Law 70/2008 concerning the obligation to give notification in connection with posting, the Danish parliament amended the law on posting with the aim to monitor workers posted to Denmark more firmly through the introduction of the new system RUT.

The plan was to provide a database for more effective and targeted supervision of foreign undertakings and their employees in Denmark. The public authorities indeed expressed a need for more and better data on the foreign undertakings and their posted workers and on foreign one-man companies¹² to ensure that they comply with the law. In particular, RUT enables the Tax Administration to control both that the posting is real and not circumventing Danish income tax regulations and that self-employed is legitimate rather than bogus selfemployed.

On the other hand, RUT is a tool requiring the same registration obligations to foreign companies as to Danish undertakings, which must be registered in the central company registration system used by the Danish public authorities to carry out their supervision and control.

The public authorities, such as the Tax Administration, the National Labour Market Authority, the Working Environment Authority, and the Immigration Service, local government authorities, the police and the Regional Employment boards have access to all **RUT-information.**

Through RUT, the supervision of foreign undertakings by the Working Environment Authority includes screening and physical inspection of the working environment of the foreign companies in order to identify undertakings that have serious working environment

¹²Also one-man companies are obliged to register in RUT.

shortcomings and therefore need to be inspected and supervised in a more detailed manner. This goes especially for companies in sectors with very hazardous working environment, e.g. construction where companies perform dangerous work such as roofing, scaffolding, etc. The Working Environment Authority extracts information from RUT at a daily basis. The Working Environment Authority in January 2011 has also established an Internet site, where private people can report data regarding companies they suspect are not correctly registered in RUT. In few months WEA received a relevant number of notices.

Furthermore, the police use RUT when investigating specific cases and to exchange information on the efforts to combat social dumping, regarding non-payment of tax, VAT and non-signing of collective agreements as well as using safety and health standard below the legal requirements.

Finally, the National Labour Market Authority obtains information from RUT monthly on numbers and industry grouping of foreign undertakings and their posted workers. Information from RUT enables the regional employment boards to monitor and analyse the extent and nature of the activities performed by foreign providers of services. This information contributes to the general picture of the common labour demand and supply in the regional labour markets.

Generally, RUT is also seen an initiative to combat social dumping and thus contribute to the protection of the autonomous Danish labour market model. It is regarded as a contribution to limiting new foreign actors' access to free riding in the sense of not being covered by collective agreement and not contributing to public tax financing of the welfare system in either the host or in their home country. Free riding bears the risk of impairing both the system in general as well as damaging the seriously operating Danish companies and their employees.

Finally, there is also a free public access to limited pieces of information about company name, work address in Denmark, the service providers contact person in Denmark and the registered data regarding the company's sector and industry. This contribute to the social partner's knowledge about foreign undertakings in Denmark in order to improve their ability to integrate these companies into the Danish labour market system; either by adoption collective agreement completed with the relevant union, or by ordinary sectoral collective agreement achieved through membership of the employers association.

Technicalities and information

RUT is a web-based registration system. It is available in English, Polish, German and Danish. It is possible to register also through a phone call. In August 2011 the responsible administrative authority, the Commerce and Companies Agency, put out a tender on a smart-phone application for foreign providers of services to use for fast registration in RUT, especially designed for service provision involving frequent changes of workplace. The functionality is expected to be implemented in December 2011.

Notification must be made on the date of the commencement of the work in Denmark. Some exemptions are established. Participants in seminars, conferences, single artistic event, in business travelling with a foreign company without a business location in Denmark, professional athletes', revision and accounting consultant services (for max. 8 days), are exempt. Also company-group internal posting until 8 days is exempt, except in construction, in agriculture and foresting, nursery, cleaning and restaurant activities, and transport according to Regulation 1072/2009/EC, October, 21, 2009).

There are some disagreements on whether RUT is technically well functioning. Unions find that the web-based-system is easy to access and simple to use. The interviewed foreign

service provider confirm this perception, while the employer organisation and the interviewed Danish Consultant Agency find that RUT still has some functional inconsistencies. Employers especially point to the present implication that foreign one-man self-employed companies must register a list of employees in order to complete the registration procedure. In particular, the employer's organisation in the construction sector finds that some of the functionalities —especially concerning the registration of self-employed — are not sufficiently user-friendly. The RUT-responsible authority rejects the idea that the need for a self-employed person to register himself on the staffing list should preclude him from registering.

Some divergence is stated concerning the need of time spending. Generally time spending is considered to be limited and re-registration of a job for a foreign provider of services already registered once in the system is easy and fast. However temporary agency has several times experienced that registration of just one posted worker has taken more than one hour.

Although RUT seems to be a recognised and sustainable functional technical solution, consultant agency finds that the present functionality of the web-based registration system holds problems which might discourage some foreign companies from completing the registration process. The representative of the employer's organisation reflects a similar experience.

At present, it is the general notion that the RUT-registration system, although functional, is still not valid and comprehensive regarding content and coverage. Unions within the construction sector estimate that around 30-40%. of foreign subcontractors actually in Denmark are registered. Employer's information concurs with this perception, whereas information from a foreign-service provider estimates that the coverage might be slightly higher. Together with some limited functional inconsistencies which probably made not full effective the system and which should be mostly overcome with the last user-friendly edition recently introduced (6 month), unions and employer's organisation agree that the main cause for RUT's lack of validity and deficient comprehensiveness is caused by insufficient public resources invested in the control and follow-up processes. In general, at the moment, compliance seems to be insufficient.

With the amendments of RUT registration by Law 509/2010, the registering obligations were broadened requiring also private households to control that their contract with a foreign-service providers is correctly registered by the foreign company. This should promote compliance. Also the increased fine in case of non-fulfilment of registration and non-control by main contractors executed from January 2011 aimed at improve compliance. However, regarding this pecuniary sanction it is up for discussion, whether the sanction (10,000 Dkr. in case of first-time violation) is sufficient for motivating foreign companies and the Danish main contractors to respecting the obligation to register. Thus, the immediate benefits of not registering are potentially high, avoiding tax' and working environment authority's control as well as union demands of collective agreements. Compared to the profits by not applying the mandatory rules, a 10,000 Dkr. fine does not appear frightening.

Administrative/operational costs

With the introduction of RUT, the government authorities' main considerations concerned the involved public costs, and the factual burden and annoyances for the private employers using the system. The factual numerical economic costs invested in the establishing, maintaining and administering the system as specified in the legal bill are:

- One-time establishing cost: 12 mill. Dkr. (approx.1.6 mill. Euros);

- Maintenance and operation of RUT: 3 million Dkr. (approx. 0.5 mill Euros), covering 1.2 mill. Dkr. (200,000 Euros) for the yearly administration carried out by the public Working Environment Authority, and 1.8 million Dkr (240.000) for the Commerce and Companies Agency's maintenance of the system;
- Information campaign about RUT: 800,000 Dkr. (108,000Euros). Further information activities will be carried out in the autumn of 2011, using the remaining resources. Relatively few resources have been used to inform foreign service providers about RUT purpose and content. Both the interviewed service providing company and the Danish consultant agency find that much more need to be done in this regard;

According to the bill, not notable cost and administrative burdens deriving from RUT were expected, neither for the foreign companies nor for the Danish main contractors. The interviewed foreign-service providing company finds that the web-based RUT registration process functions very well and that it does not entail much time consumption. Some private consulting bureaus offer services to Danish entrepreneurs and foreign companies advising or helping them to register in RUT. These agencies normally invoice at between 1,500 - 2,000 Dkr. per hour (200-270 Euro), but the service is often performed as part of a broader customer relationship involving additional tasks. Generally, the limited administrative burdens for the foreign providers of services are estimated to be outweighed by the benefits.

It seems fair to conclude that the costs for the public authorities administering RUT are weak, whereas the costs for the service providing companies and the Danish main contractors by using RUT are moreover negligible, although some further technical developments of the system seems to be required.

Finally, RUT-monitoring system bears resemblance to the previous registration systems, meaning that implementation of RUT has not created any new coordination problems.

The impact of the monitoring tool on the main features of posting, costs and benefits, and the implementation of the rules

No remarkable shifts or changes in the main features of posting neither in general nor in specific sectors or industries have been experienced as realistic consequence of RUT (information has been collected through interviews with the involved actors). In fact, no sudden changes in size, trends, features or duration of posting have been recorded or even noted with the introduction of RUT or the previous monitoring systems. To a larger extent the financial crisis and the social partners own internal collectively agreed procedures are more prominent reasons affected the development of the phenomenon.

Table C1 summarises the main benefits, costs and aspects of sustainability of RUT-Register according to different actors as they emerge from the field research. Both unions and the interviewed foreign posting companies find that the illicit bogus companies that were numerous in the first years after the enlargement has diminished to some extent. However, none of the parties associate this development directly with the introduction of the RUT-registration system. They rather see this as consequence of the general economic downturn and their own improved ability to detect and control the field. Some expectations of reduction in the number of bogus self-employed one-man-companies and other distortions in Denmark as a consequence of RUT depend on whether the resources invested in controls will be sufficient.

Table C1. Benefits, costs and sustainability of RUT-Register for different actors

Actors	Benefits	Costs	Sustainability
PAs	Easy to access and use. Potential for on-going technical improvements	Establishment, maintenance, and development. Information: campaigns and on-going information	Web-platform: sustainable cost efficient and far reaching
Firms	Easy to access and easy to use (though some inconsistencies) Potential of more equal competitive basis for foreign and Danish service providers.	Time spending to register Inconveniencies/Breakdowns Risk of control from the Working Environment Agency, Tax authorities and the Danish Unions	Would be more sustainable and comprehensive if the system was based on direct exchange of information between public authorities in the MSs
Trade unions	Easy to use and access. Necessary basis for future initiatives on cross national cooperation between public authorities. Basis for activities against social dumping. Sustainability of regulated and fair labour conditions.	No mentionable economic cost involved for service provider or Danish contractor. Extended control necessary from public authorities and especially the police's enforcement of sanctions. A pretext for inaction if sufficient public control resources are invested.	The sustainability of RUT depends on resources invested in control and sanctioning of the system.
Employer associations	Right method but not sufficiently user friendly.	Functional inconveniencies (too time necessary for the declaration) can discourage foreign companies will choose to choose Denmark as destination country or can lead to circumvent the obligation.	The sustainability of RUT depends on balancing of the cost for the companies when registering. If these are not reasonable foreign companies will avoid Denmark or finds way to circumvent registration.
Experts	An at least a potential easy to- use way of register information on foreign providers of services and their posted workers. Improved data	Extensive administrative and union follow-up on registration and non-registration.	RUT is sustainable also in case the Danish labour market model needs to be further protected by legislation (minimum wage or erga omnes). Questionable if RUT constitutes a restriction towards transnational service provision and thus pose breach of the EU regulation on freedom to provide services, i.e. for self-employed. For the Danish labour market system's use of RUT, the sustainability depends on the Danish implementation of the PWD being conform to the EU-requirements.

The social partners do not have any sense concerning whether and not or how the trends on types of foreign providers of services have been changed due to the introduction of the RUT-registration system. However, the unions find that the above mentioned exemption of cabotage transport from the registration obligation as well as the short-term exemptions leaves easier access to bogus posting in Denmark.

Although both unions and the foreign company abide to the notion that RUT at this point in time contributed only to a minor extent to improving legality and ethics among the service providers, the registration system is seen as a cornerstone in combating social dumping. In fact, the publication of the workplace location of the foreign providers of services has contributed to improvement of the unions' abilities to planning their efforts to obtain collective agreements with the foreign providers of services. In addition a potential benefit of RUT is represented by the fact that it can represent a "positive-list", where main contracting entrepreneurs as well as private households will look for well integrated and law-abiding foreign providers entailing low risk regarding work hindrance due to wage or working environment issues. The interviewed foreign company affirmed that they refer to their legal status in marketing and in the layout of their formal contract, expecting customers to seeing this as an advantage.

Benefits for the registered companies as well as for the Danish contracting companies would seem to be a more equal level for the competition and the potential of registration and general application of mandatory rules and requirements to be a quality warrant.

Source: Case study on RUT-register performed within the present project by FAOS – Employment Relation Research Centre, FAOS.dk – (University of Copenhagen).

The LIMOSA - Belgium

Since 2007, all activities of employees and self-employed persons and apprentices, when posted to Belgium, have to be declared in advance to the Belgian authorities. The declaration to the registration system LIMOSA ("Landenoverschrijdend Informatiesysteem ten behoeve van Migratie Onderzoek bij de Sociale Administratie" which means "Trans-country Information system for the benefit of Migration Research for the Social affairs Administration") is mandatory. The National Social Security Office (ONSS-RSZ) established the registration system, mainly because it already had experience with a tool for the registration of Belgian employees, the so called DIMONA.

With the LIMOSA declaration system, the Belgian authorities wanted to gain reliable statistical information on the presence of posted workers in Belgium. Further, this monitoring tool allows for a better control of these foreign employment activities, thus contributing to the free movement of services in compliance with both European and Belgian regulations.

The result of the mandatory LIMOSA declaration is a centralized database which is part of an interconnected system of databases. The LIMOSA database is also accessible for all competent inspection services and can be used for inspection purposes allowing to know where the posted workers are providing their services, to cross data with other national databases such as the database of the National Employment Office and with databases in other countries (a pilot project is currently being set up in collaboration with France with the aim of matching LIMOSA data with French data in order to detect frauds).

The registration of postings in fact facilitates the task of the different inspection services in Belgium and the he Crossroads Bank for Social Security and the National Office for Social Security voluntarily offer this application to the European Commission and the other MSs as a basis for a possible pan-European social service. Far-reaching forms of cooperation are among the possibilities, even though there has not yet been taken an initiative in this direction.

However, with regard to using the LIMOSA database as an instrument for controlling terms and conditions of employment, the database could be seen as a 'passive' database since it does not signal possible inconsistencies that could require further inspection. A more 'active' database should mean a database that signals possible inconsistencies or uses some sort of 'alarm bell' to signal cases especially worth to control.

Belgian social partners generally positively assess the system. Trade unions advocate controlled labour force mobility and the strengthening of the collaboration between European inspectorate services to increase controls and combat illegal work. Moreover, employer associations strongly support the principle that forces MSs to impose certain minimum obligations on foreign enterprises posting workers.

Even though employer associations are in favour of a registration tool and collaborate with inspection services to fight unfair competition, employer associations worry that inspection services shall primarily focus on those firms that did the LIMOSA declaration and

consequently are registered in the LIMOSA database, while it is probably more worthwhile to focus on those firms that do not bother to make the mandatory declaration. Arguing that firms who make the LIMOSA declaration are probably more bona fide than the firms who do not make the declaration, the LIMOSA database might have a sort of perverse effect on these firms.

Technicalities and information

The LIMOSA declaration is a legal requirement to operate through posted workers in Belgium. It has to be noted that the declarations do not reflect the number of workers posted to Belgium, because one worker could be registered multiple times (as with E101 certificates). The standard LIMOSA declaration always has to cover the duration of the activities in Belgium. There is no maximum validity period. If the posting lasts longer than originally declared, a new declaration will have to be made. This has to be done before the expiry of the originally declared duration. If the posting does not take place, the declaration has to be cancelled. This has to be done no later than the starting date of the declared posting. When an activity is carried out structurally in different countries and a considerable part of the work is done in Belgium, (for instance salesmen who work structurally in different countries) there is a simplified LIMOSA declaration. The simplified LIMOSA declaration is valid for a maximum period of 12 months and can be extended after the expiry of this period for another period of 12 months (ad infinitum). The data requested are less than those for an ordinary declaration, for instance it is not necessary to state the place of employment or the customer in Belgium, and to submit a time schedule for the employee. These provisions do not apply however to the construction sector and to temporary agencies.

Non-compliance may result in penal or administrative sanctions. Both the employer and the person appointed by him or his agent can be punished. The one for whom or on whose premises the work is carried out in Belgium can also be prosecuted, at least if he fails to declare the absence of a LIMOSA to the government. Also for the foreign employer and the Belgian client, non-compliance may lead to an administrative fine and a penal sanction. In case of recidivism within the same year, the penal sanctions may be doubled.

According to employer associations, the LIMOSA declaration procedure still needs to be simplified. Arguing that it is important for employers to have as little workload as possible related to administrative procedures, they strive for less administrative burden and ask the suppression of the obligation to declare the length of the posting and the working time of the posted workers. Employer associations argue as well that intra-group postings that postings between different branches of a company entail a lot of administrative costs. Therefore they ask to include intra-group postings in the list of exemptions to the mandatory LIMOSA declaration.

Administrative/operational costs

LIMOSA took about one year to be developed. The total resources spent on the development of the monitoring tool, is 4.8 million euro. This includes the technological development and several usability tests in Belgium and abroad (UK, France, Germany), as well as communication initiatives such as brochures, manuals, presentations, publicity in foreign newspapers.

Concerning the burdens for firms, several foreign companies that want to post workers to Belgium decide to outsource the LIMOSA declaration to consultancy firms. Also Belgian consultancy firms offer this service. They usually request the necessary information on the workers who are to be posted to Belgium, make the LIMOSA declarations, print out the LIMOSA-1 certificates and send these certificates to the posting foreign companies. For

example, a declaration made by a junior assistant in a consultancy firm would be charged at an hourly rate of 98 euro per hour and take 15 minutes to half an hour to be completed. The reason for the outsourcing is mainly a lack of proper information on the necessary procedures and the fear of non-compliance. Even though the declaration system is user-friendly, confirmed as well by the consultants as by the firms who do make the declarations themselves, the firms who outsource the declaration seem to continue with the outsourcing.

The impact of the monitoring tool on the main features of posting, costs and benefits, and the implementation of the rules

Approximately, the number of LIMOSA declarations is twice (or more) the amount of E101 certificates in the Belgian database. The probable reason is that the mandatory LIMOSA declaration system is set up and monitored by the Belgian authorities, while the National Social Security Office (ONSS-RSZ) receives only a portion of the E101 certificates issued in other EU Member States. There is also well known evidence that not all posted workers have an E101 certificate. Although figures are only limitedly available (for 3 years), it seems safe to conclude that the LIMOSA declarations have increased the visibility of posted employment in Belgium. However, the employer associations have the impression that the mandatory LIMOSA declaration has not had any effect on the extent or on the features of posting.

Most of the LIMOSA declarations were made for posted workers coming from neighbouring countries of Belgium. With an average duration of postings declined from more than 30 days in 2007 to 23 days in 2010, the construction sector is by far the most important economic sector with regard to the number of LIMOSA declarations. On the second and third place we find two manufacturing industries, although the manufacturing sector of basic metals and fabricated metal products (etc.) accounts for almost three times as much declarations as the manufacturing sector of chemicals, chemical products and man-made fibres.

Table C2 summarises the main benefits, costs and aspects of sustainability of LIMOSA according to different actors as they emerge from the field research.

Table C2. Benefits, costs and sustainability of LIMOSA for different actors

Actors	Benefits	Costs	Sustainability
PAs	Monitoring Controlling No longer dependent on foreign institutions to send the E101 certificates	Development costs Communication initiatives Search costs for inspections ('passive database') According to social inspection: No effect on fraud	Discrimination-check Compelling reason in the public interest-check Proportionality-check - user-friendly - web application in 4 languages - immediate delivery of LIMOSA-certificate In favour of pan-European LIMOSA According to social inspection: international cooperation between inspection services needs to be improved User-friendly
Firms	Monitoring Controlling User-friendly Immediate certification Exemption of drawing up certain social documents (until 12 months)	Costs of drawing up certain social documents after 12 months Costs of non-compliance (administrative and penal) Use of consultants (a declaration takes approx. 15-30min, at 98 euro/h)	web application in 4 languages (although users do not start doing the declaration themselves because of insecurity of not complying to all the rules Communication could be improved In favour of European harmonization
Trade unions	Monitoring Controlling	Own initiatives (i.e. collaboration with Polish trade unions)	Still insufficient control (and possible conflict with privacy issues) Need for improved international cooperation In favour of pan-European LIMOSA In favour of several liability (concerning terms and conditions of employment)
Employer associations	Monitoring Controlling No effect on number of features of posting	Obliged control by the final user Costs of non-compliance (administrative and penal) Intra-group postings entail a lot of administrative costs Own communication initiatives	Obliged control by the final user (possibly in conflict with privacy issues) Opposed to several liability Too much information needs to be given in the declaration (i.e. time schedule of the worker) In favour of exemptions for intragroup postings Worry that inspections primarily focus on firms that made the declaration In favour of European harmonization

Source: Case study on LIMOSA performed within the present project by HIVA – Onderzoeks instituut voor Arbeid en Samenleving Onderzoeksgroep Arbeidsmarkt- Katholieke Universiteit Leuven.

ANNEX D – NEW ADMINISTRATIVE AND COMPLIANCE COSTS IMPOSED BY OPTION 3, 4, AND 5: REPORTING SHEET BY COUNTRY

Country	Provision	Type of IO/compliance costs	Required actions	Target group	A. Tariff	B. Time or units	C. Price A.*B.	Num. of actions per year	Type of cost	Total admin. costs
Austria	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	25.23	4,800	2,018.40	1	one-off	2,018
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
11,505	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	40,083	per year	5,612
received	b	Compliance costs	Selection and monitoring costs	RF	24.69	15	6.17	40,083	per year	247,413
40,083	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	40,083	one-off	1,923,992
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	25.23	105,600	44,404.80	5	per year	222,024
25.23	c.3	Notification of activity	Other: Operation variable costs	PA	25.23	5	2.10	40,083	per year	84,275
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	40,083	periodical	12,025
46.31	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	46.31	15	11.58	11,505	per year	133,198
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	24.69	15	6.17	40,083	per year	247,413
Belgium	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	34.68	4,800	2,774.40	1	one-off	2,774
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
46,260	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14		per year	16,096
received	b	Compliance costs	Selection and monitoring costs	RF	32.80	15	8.20	114,972	per year	942,768
114,972	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	114,972	one-off	5,518,642
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	34.68	105,600	61,036.80	5	per year	305,184
34.68	c.3	Notification of activity	Other: Operation variable costs	PA	34.68	5	2.89	114,972	per year	332,268
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	114,972	periodical	34,492
59.23	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	59.23	15	14.81	46,260	per year	684,990
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	32.80	15	8.20	114,972	per year	942,768
Bulgaria	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	3.44	4,800	275.20	1	one-off	275
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
4,739	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	2,800	per year	392
received	b	Compliance costs	Selection and monitoring costs	RF	3.11	15	0.78	2,800	per year	2,177
2,800	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	2,800	one-off	134,400
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	3.44	105,600	6,054.40	5	per year	30,272
3.44	c.3	Notification of activity	Other: Operation variable costs	PA	3.44	5	0.29	2,800	per year	803
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	2,800	periodical	840
5.83	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	5.83	15	1.46	4,739	per year	6,907
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	3.11	15	0.78	2,800	per year	2,177

Country	Provision	Type of IO/compliance costs	Required actions	Target group	A. Tariff	B. Time or units	C. Price A.*B.	Num. of actions per year	Type of cost	Total admin. costs
Cyprus	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	22.29	4,800	1,783.20	1	one-off	1,783
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
143	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	2,381	per year	333
received	b	Compliance costs	Selection and monitoring costs	RF	8.26	15	2.07	2,381	per year	4,916
2,381	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	2,381	one-off	114,277
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	22.29	105,600	39,230.40	5	per year	196,152
22.29	c.3	Notification of activity	Other: Operation variable costs	PA	22.29	5	1.86	2,381	per year	4,422
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	2,381	periodical	714
14.23	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	14.23	15	3.56	143	per year	510
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	8.26	15	2.07	2,381	per year	4,916
Czech Rep.	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	10.87	4,800	869.60	1	one-off	870
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
14,244	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	16,988	per year	2,378
received	b	Compliance costs	Selection and monitoring costs	RF	9.47	15	2.37	16,988	per year	40,219
16,988	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	16,988	one-off	815,421
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	10.87	105,600	19,131.20	5	per year	95,656
10.87	c.3	Notification of activity	Other: Operation variable costs	PA	10.87	5	0.91	16,988	per year	15,388
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	16,988	periodical	5,096
22.03	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	22.03	15	5.51	14,244	per year	78,448
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	9.47	15	2.37	16,988	per year	40,219
Denmark	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	36.61	4,800	2,928.80	1	one-off	2,929
Sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12.000.00	1	one-off	12,000
3.774	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	18.149	per year	2,541
Received	b	Compliance costs	Selection and monitoring costs	RF	34.05	15	8.51		per year	154,491
18,149	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00		one-off	871,141
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	36.61	105,600			per year	322,168
36.61	c.3	Notification of activity	Other: Operation variable costs	PA	36.61	5	3.05		per year	55,369
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30		periodical	5,445
47.95	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	47.95	15	11.99		per year	45,243
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	34.05	15	8.51		per year	154,491
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Country	Provision	Type of IO/compliance costs	Required actions	Target group	A. Tariff	B. Time or units	C. Price A.*B.	Num. of actions per year	Type of cost	Total admin. costs
Estonia	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	9.81	4,800	784.80	1	one-off	785
Sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
8,723	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	2,088	per year	292
Received	b	Compliance costs	Selection and monitoring costs	RF	9.74	15	2.44	2,088	per year	5,085
2,088	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	2,088	one-off	100,243
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	9.81	105,600	17,265.60	5	per year	86,328
9.81	c.3	Notification of activity	Other: Operation variable costs	PA	9.81	5	0.82	2,088	per year	1,707
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	2,088	periodical	627
14.93	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	14.93	15	3.73	8,723	per year	32,559
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	9.74	15	2.44	2,088	per year	5,085
Finland	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	30.60	4,800	2,448.00	1	one-off	2,448
Sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
2,146	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	19,260	per year	2,696
Received	b	Compliance costs	Selection and monitoring costs	RF	22.24	15	5.56	19,260	per year	107,087
19,260	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	19,260	one-off	924,490
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	30.60	105,600	53,856.00	5	per year	269,280
30.60	c.3	Notification of activity	Other: Operation variable costs	PA	30.60	5	2.55	19,260	per year	49,114
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	19,260	periodical	5,778
38.23	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	38.23	15	9.56	2,146	per year	20,515
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	22.24	15	5.56	19,260	per year	107,087
France	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	28.87	4,800	2,309.60	1	one-off	2,310
Sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
219,795	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	151,168	per year	21,164
Received	b	Compliance costs	Selection and monitoring costs	RF	30.47	15	7.62	151,168	per year	1,151,525
151,168	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	151,168	one-off	7,256,079
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	28.87	105,600	50,811.20	5	per year	254,056
28.87	c.3	Notification of activity	Other: Operation variable costs	PA	28.87	5	2.41	151,168	per year	363,686
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	151,168	periodical	45,350
50.71	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	50.71	15	12.68	219,795	per year	2,786,456
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	30.47	15	7.62	151,168	per year	1,151,525

Country	Provision	Type of IO/compliance costs	Required actions	Target group	A. Tariff	B. Time or units	C. Price A.*B.	Num. of actions per year	Type of cost	Total admin. costs
Germany	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	30.49	4,800	2,439.20	1	one-off	2,439
Sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
179,279	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	224,138	per year	31,379
Received	b	Compliance costs	Selection and monitoring costs	RF	18.22	15	4.56	224,138	per year	1,020,951
224,138	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	224,138	one-off	10,758,647
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	30.49	105,600	53,662.40	5	per year	268,312
30.49	c.3	Notification of activity	Other: Operation variable costs	PA	30.49	5	2.54	224,138	per year	569,499
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	224,138	periodical	67,242
45.02	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	45.02	15	11.26	179,279	per year	2,017,791
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	18.22	15	4.56	224,138	per year	1,020,951
Greece	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	13.66	4,800	1,092.80	1	one-off	1,093
Sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
3,224	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	9,307	per year	1,303
Received	b	Compliance costs	Selection and monitoring costs	RF	17.29	15	4.32	9,307	per year	40,230
9,307	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	9,307	one-off	446,738
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	13.66	105,600	24,041.60	5	per year	120,208
13.66	c.3	Notification of activity	Other: Operation variable costs	PA	13.66	5	1.14	9,307	per year	10,595
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	9,307	periodical	2,792
14.78	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	14.78	15	3.70	3,224	per year	11,911
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	17.29	15	4.32	9,307	per year	40,230
Hungary	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	10.73	4,800	858.40	1	one-off	858
Sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
36,377	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	8,302	per year	1,162
Received	b	Compliance costs	Selection and monitoring costs	RF	7.23	15	1.81	8,302	per year	15,006
8,302	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	8,302	one-off	398,490
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	10.73	105,600	18,884.80	5	per year	94,424
10.73	c.3	Notification of activity	Other: Operation variable costs	PA	10.73	5	0.89	8,302	per year	7,423
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30			2,491
16.37	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	16.37	15	4.09		per year	148,874
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	7.23	15	1.81		per year	15,006
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Country	Provision	Type of IO/compliance costs	Required actions	Target group	A. Tariff	B. Time or units	C. Price A.*B.	Num. of actions per year		Total admin. costs
Ireland	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	35.72	4,800	2,857.60	1	one-off	2,858
Sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
957	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	7,723	per year	1,081
Received	b	Compliance costs	Selection and monitoring costs	RF	23.55	15	5.89	7,723	per year	45,471
7,723	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	7,723	one-off	370,722
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	35.72	105,600	62,867.20	5	per year	314,336
35.72	c.3	Notification of activity	Other: Operation variable costs	PA	35.72	5	2.98	7,723	per year	22,990
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	7,723	periodical	2,317
45.76	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	45.76	15	11.44	957	per year	10,946
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	23.55	15	5.89	7,723	per year	45,471
lée lu	0.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	25.35	4,800	2,028.00	1	one-off	2,028
Italy	a.1 a.2	· · · · · · · · · · · · · · · · · · ·	0 0	PA	0.03	400,000	12,000.00	1	one-off	12,000
sent 2.687	a.2 a.3	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	0.14	FG 202		7,882
, , , , , , , , , , , , , , , , , , , ,	a.s b	Non labelling information for third parties Compliance costs	Copying: Leaflet - Printing	RF	22.21	15	5.55		per year	312,619
received 56.302	c.1	Other	Selection and monitoring costs Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00		per year one-off	2,702,515
LC in PA	c.1	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	25.35	105,600	44,616.00	50,302		223,080
25.35	c.3	Notification of activity	Other: Operation variable costs Other: Operation variable costs	PA	25.35	103,000	2.11	56,302	per year	118,939
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30		T 1	16,891
35.28	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	35.28	15	8.82	2,687		23,699
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	22.21	15	5.55		per year per year	312,619
LOW LC	C.0	inspection of behalf of PA	inspecting and checking. Contractor monitors the running of declaration	KF	22.21	13	5.55	30,302	рег уеаг	312,019
Latvia	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	8.54	4,800	683.20	1	one-off	683
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
913	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	2,982	per year	418
received	b	Compliance costs	Selection and monitoring costs	RF	6.52	15	1.63	2,982	per year	4,861
2,982	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	2,982	one-off	143,156
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	8.54	105,600	15,030.40	5	per year	75,152
8.54	c.3	Notification of activity	Other: Operation variable costs	PA	8.54	5	0.71	2,982	per year	2,122
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30		periodical	895
9.95	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	9.95	15	2.49		per year	2,272
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	6.52	15	1.63		per year	4,861
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Country	Provision	Type of IO/compliance costs	Required actions	Target group	A. Tariff	B. Time or units	C. Price A.*B.	Num. of actions per year	Type of cost	Total admin. costs
Lithuania	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	8.21	4,800	656.80	1	one-off	657
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
1,657	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	5,974	per year	836
received	b	Compliance costs	Selection and monitoring costs	RF	4.77	15	1.19	5,974	per year	7,123
5,974	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	5,974	one-off	286,728
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	8.21	105,600	14,449.60	5	per year	72,248
8.21	c.3	Notification of activity	Other: Operation variable costs	PA	8.21	5	0.68	5,974	per year	4,087
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	5,974	periodical	1,792
12.12	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	12.12	15	3.03	1,657	per year	5,020
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	4.77	15	1.19	5,974	per year	7,123
Luxembourg	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	33.62	4.800	2,689.60	1	one-off	2,690
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
47,008	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	29 245	per year	4,094
received	h	Compliance costs	Selection and monitoring costs	RF	33.62	15	8.41		per year	245,806
29,245	~	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00		one-off	1,403,771
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	33.62	105,600	59,171.20	5	per year	295,856
33.62	c.3	Notification of activity	Other: Operation variable costs	PA	33.62	5	2.80	29.245	per year	81,935
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	29,245		8,774
33.62	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	33.62	15	8.41	47,008	<u> </u>	395,100
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	33.62	15	8.41	29,245	· · ·	245,806
Malta	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	11.58	4,800	926.40	1	one-off	926
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
102	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	1,664	per year	233
received	b	Compliance costs	Selection and monitoring costs	RF	9.03	15	2.26	1,664	per year	3,756
1,664	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	1,664	one-off	79,863
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	11.58	105,600	20,380.80	5	per year	101,904
11.58	c.3	Notification of activity	Other: Operation variable costs	PA	11.58	5	0.97	1,664	per year	1,606
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	1,664	periodical	499
12.52	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	12.52	15	3.13	102	per year	320
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	9.03	15	2.26	1,664	per year	3,756

Country	Provision	,, ,		Target group	A. Tariff	B. Time or units	C. Price A.*B.	Num. of actions per year	Type of cost	Total admin. costs
Netherlands	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	38.95	4,800	3,116.00	1	one-off	3,116
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
9,299	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	91,082	per year	12,751
received	b	Compliance costs	Selection and monitoring costs	RF	23.34	15	5.84	91,082	per year	531,461
91,082	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	91,082	one-off	4,371,918
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	38.95	105,600	68,552.00	5	per year	342,760
38.95	c.3	Notification of activity	Other: Operation variable costs	PA	38.95	5	3.25	91,082	per year	295,636
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	91,082	periodical	27,324
46.28	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	46.28	15	11.57	9,299	per year	107,589
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	23.34	15	5.84	91,082	per year	531,461
Poland	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	9.37	4,800	749.60	1	one-off	750
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
227,672	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	14,853	per year	2,079
received	b	Compliance costs	Selection and monitoring costs	RF	7.09	15	1.77		per year	26,328
14,853	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00		one-off	712,964
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	9.37	105,600	16,491.20	5	per year	82,456
9.37	c.3	Notification of activity	Other: Operation variable costs	PA	9.37	5	0.78	14,853	per year	11,598
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	14,853	periodical	4,456
9.08	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	9.08	15	2.27	227,672	per year	516,816
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	7.09	15	1.77	14,853	per year	26,328
Portugal	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	14.68	4,800	1,174.40	1	one-off	1,174
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
64.345	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	12,706		1,779
received	b	Compliance costs	Selection and monitoring costs	RF	12.75	15	3.19	12,706	per year	40,500
12,706	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	12,706		609,889
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	14.68	105,600	25,836.80	•	per year	129,184
14.68	c.3	Notification of activity	Other: Operation variable costs	PA	14.68	5	1.22		per year	15,544
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign		0.30	60	0.30		periodical	3,812
19.64	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	19.64	15	4.91		per year	315,933
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	12.75	15	3.19		per year	40,500

Country	Provision	ision Type of IO/compliance costs Required actions		Target group	A. Tariff	B. Time or units	C. Price A.*B.	Num. of actions per year		Total admin. costs
Romania	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	5.28	4,800	422.40	1	one-off	422
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
9,078	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	10,585	per year	1,482
received	b	Compliance costs	Selection and monitoring costs	RF	3.95	15	0.99	10,585	per year	10,453
10,585	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	10,585	one-off	508,086
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	5.28	105,600	9,292.80	5	per year	46,464
5.28	c.3	Notification of activity	Other: Operation variable costs	PA	5.28	5	0.44	10,585	per year	4,657
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	10,585	periodical	3,176
6.38	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	6.38	15	1.60	9,078	per year	14,480
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	3.95	15	0.99	10,585	per year	10,453
Slovakia	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	6.68	4,800	534.40	1	one-off	534
Sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
9,078	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	4,562	per year	639
received	b	Compliance costs	Selection and monitoring costs	RF	6.99	15	1.75		per year	7,972
4,562	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00		one-off	218,970
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	6.68	105,600	11,756.80	5	per year	58,784
6.68	c.3	Notification of activity	Other: Operation variable costs	PA	6.68	5	0.56	4,562	per year	2,539
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	4,562	periodical	1,369
11.84	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	11.84	15	2.96	9,078	per year	26,872
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	6.99	15	1.75	4,562	per year	7,972
Slovenia	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	18.19	4,800	1.455.20	1	one-off	1,455
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12.000.00	1	one-off	12,000
12,908	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	3 838	per year	537
received	b	Compliance costs	Selection and monitoring costs	RF	13.68	15	3.42			13,124
3,838	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00		one-off	184,200
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	18.19	105,600			per year	160,072
18.19	c.3	Notification of activity	Other: Operation variable costs	PA	18.19	5	1.52		per year	5,817
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30		periodical	1,151
21.01	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	21.01	15	5.25		per year	67,798
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	13.68	15	3.42		per year	13,124
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Country	Provision	Type of IO/compliance costs	Required actions	Target group	A. Tariff	B. Time or units	C. Price A.*B.	Num. of actions per year	Type of cost	Total admin. costs
Spain	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	22.12	4,800	1,769.60	1	one-off	1,770
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
26,526	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	86,158	per year	12,062
received	b	Compliance costs	Selection and monitoring costs	RF	16.01	15	4.00	86,158	per year	344,846
86,158	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	86,158	one-off	4,135,567
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	22.12	105,600	38,931.20	5	per year	194,656
22.12	c.3	Notification of activity	Other: Operation variable costs	PA	22.12	5	1.84	86,158	per year	158,817
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	86,158	periodical	25,847
22.58	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	22.58	15	5.65	26,526	per year	149,738
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	16.01	15	4.00	86,158	per year	344,846
Sweden	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	33.62	4.800	2,689.60	1	one-off	2,690
sent	a.1 a.2	Non labelling information for third parties	Designing information materials: leaflet - Contents Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
3,503	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.03	400,000	0.14	21 72/	per year	3,041
received	h	Compliance costs	Selection and monitoring costs	RF	25.03	15	6.26		per year	135,936
21,724	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00		one-off	1,042,738
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	33.62	105,600	59,171.20	5	per year	295,856
33.62	c.3	Notification of activity	Other: Operation variable costs	PA	33.62	5	2.80	21 724	per year	60,863
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	21,724	i i	6,517
48.29	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	48.29	15	12.07	3,503		42,295
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	25.03	15	6.26	21,724		135,936
United King.	a.1	Non labelling information for third parties	Designing information materials: leaflet - Contents	PA	25.25	4,800	2,020.00	1	one-off	2,020
sent	a.2	Non labelling information for third parties	Designing information materials: Translation	PA	0.03	400,000	12,000.00	1	one-off	12,000
39,354	a.3	Non labelling information for third parties	Copying: Leaflet - Printing	PA	0.14	60	0.14	38,550	per year	5,397
received	b	Compliance costs	Selection and monitoring costs	RF	21.94	15	5.49	38,550	per year	211,448
38,550	c.1	Other	Buying IT equipment & supplies: Set up the monitoring system	PA	48.00	60	48.00	38,550	one-off	1,850,407
LC in PA	c.2	Other	Other: Operation fix costs (personnel costs plus maintenance)	PA	25.25	105,600	44,440.00	5	per year	222,200
25.25	c.3	Notification of activity	Other: Operation variable costs	PA	25.25	5	2.10	38,550	per year	81,116
High LC	c.4	Non labelling information for third parties	Familiarising with the information obligation: Information campaign	PA	0.30	60	0.30	38,550	periodical	11,565
32.82	c.5	Notification of activity	Submitting the info. to the relevant authorities: Notification of posting	SF	32.82	15	8.21	39,354	per year	322,898
Low LC	c.6	Inspection of behalf of PA	Inspecting and checking: Contractor monitors the fulfilment of declaration	RF	21.94	15	5.49	38,550	per year	211,448

	Legenda
Target group:	PA= Public Authorities
	SF= Sending Firms
	RF= Receiving Firm
A. Tariff	It is the relevant tariff per hour or per relevant unit of service.
	For Target group PA it is labelled LC in PA and is defined as the hourly labour costs in public administration and defence; compulsory
	social security (Nace 2 O84) with the exception of France and Slovakia (Labour costs in public administration and community services
	Nace 1.1. L) and Austria, Belgium, Luxembourg, Malta and Sweden (Labour costs in Services). Source Labour Costs Survey 2008
	Eurostat.
	For actions required to SF/RF, tariff is the hourly labour cost in activities of head offices; management consultancy activities (Nace
	Rev. 2, M 70) - labelled as High LC - or the labour costs in office administrative, office support and other business support activities
	(Nace Rev. 2 N82 - MIN -) – labelled as Low LC. The choice depends on the skills involved in the required administrative activity. In
	some cases missing data are replaced by other data: for Luxembourg we use the labour cost in service, for Portugal Low LC is calculated
	as the costs in service. Source Labour Cost Survey 2008 Eurostat.
	Tariff of leaflets printing per copy is calculated as the Internet based printing services average cost per 10,000 leaflets (Ismeri Europa)
	Tariff of translation is calculated as the internet based translation services cost per keystroke (Ismeri Europa)
B. Time or units	When the tariff corresponds to hourly labour cost, time corresponds to the minutes which are necessary to one person to perform the
	required administrative action.
	In the case of translation the total number of keystrokes required by the administrative action is provided.
	In the Report sheet 60 minutes are normally associated to other types of tariffs not hourly based for calculation needs only.
C. Price per action	I is calculated as A.*B.
Number of actions	This column reports for One-off action.
(per year)	Otherwise it reports the number of received/sent postings in 2010 according to Ismeri Europa simulation when the price of the
	administrative action is calculated per individual posting.
	When the action requires more than one person in PA., the column reports the number of people involved in the administrative action
	(price is calculate for one person performing the action.

	Summary – New administrative and compliance costs in EU27 (Options 3, 4, and 5)											
	Provision	Type of IO	O/Compliance costs	Requ	equired administrative action Tag gro		Tot. admin. cost	Per Posting	Туре			
EU 27	a.1	parties	ng information for third	Desig	gning information materials: leaflet - Contents	PA	44,355	0.04	one-off			
Sent	a.2	parties	ng information for third	Desig	gning information materials: Translation	PA	324,000	0.32	one-off			
997,585	a.3	Non labelli parties	ng information for third	Copy	Copying: Leaflet - Printing PA		139,662	0.14	per year			
Received	b	Complianc	e costs	Select applie	tion and monitoring costs: Contractors ensure the cation of minimum pay by subcontractor	RF	5,673,573	5.69	per year			
997,585	c.1	Other			ying IT equipment & supplies: Set up the monitoring		47,884,058	48.00	one-off			
EU27 Average PA	c.2	Other			r: Operation fix costs (personnel costs plus tenance)	PA	4,879,072	4.89	per year			
20.60	c.3	Notification	n of activity	Other	r: Operation variable costs	PA	2,362,814	2.37	per year			
EU27 Average High LC	c.4	Non labelli parties	ng information for third	Familiarising with the information obligation: Information campaign		PA	299,275	0.30	periodical			
27.51	c.5	Notification	n of activity		nitting the info. to the relevant authorities: ication of posting	SF	7,969,176	7.99	per year			
EU27 Average Low LC	c.6	Inspection	of behalf of PA		Inspecting and checking: Contractor monitors the fulfilment of declaration duty of the subcontractor		5,673,573	5.69	per year			
16.74												
Overall admin./c	Overall admin./compl. costs one-off 48,252,413				Overall admin./compl. one-off costs per posting 48.37							
Overall admin./c	Overall admin./compl. costs 75,249,558				Overall admin./compl. costs per posting 75.43							

ANNEX E - NATIONAL CASE STUDIES: A TRANSVERSAL ANALYSIS

The national case studies provide substantial and useful information on the present state of posting in a number of relevant countries in terms of both the inward and outward flows of posted workers and of the regulation and monitoring of posting. In particular, the three main 'receiving' MSs have been included (Germany, France and Belgium), which alone represent almost half of all inward postings over the 2007-2009 and around 40% of all outward postings, as counted by E101 forms (EC 2009, 2011).

The other two MSs fully integrated in the study, Denmark and UK, represent significantly lower shares of posting – clearly for Denmark, also due to the relatively smaller size of the economy. For these two countries, the interest of the case studies is mainly linked to institutional factors. Both countries share a system where industrial relations are mainly self-regulated, especially in the field of collective bargaining, by the interplay of the two sides of industry, with no intervention by the state in view of making collective agreements generally binding, which is a key element in the discussion over the PWD.

Beyond this significant similarity, the two national institutional frameworks, in terms of the regulation of labour, are quite different. Denmark belongs to the Nordic model of 'coordinated market economies', whereas the UK is a prime example of 'liberal market economies' (Hall and Soskice 2001, Dølvik 2008). In terms of industrial relations, this means that in Denmark the institutional support of trade union representation and collective bargaining is widespread, whereas in the UK the role of autonomous regulation of labour is fully recognised, but there are limited promotional measures. Moreover, the structure of collective bargaining is centred on industry-wide agreements in Denmark, even though with a significant degree of flexibility at decentralised level; in the UK firm-level bargaining prevails, with an important exception in the engineering construction sector. It is exactly in this sector that our analysis will be focused, since the presence of multi-employer and notably sectoral agreements becomes relevant for posting, as a means to set the minimum protections covered by Art. 3.1 PWD which is alternative to legislation. Indeed, other important common features of the two countries are the importance that the question of posted workers has gained in the public debate in the most recent years and the actions autonomously undertaken by industrial relations actors to address the issues raised by posting.

Besides the importance in terms of flows, Germany, France and Belgium present interesting features for the regulation of posting. All countries share a system for extending the coverage of collective bargaining and in Germany this is specifically implemented through the regulation of posting. They all introduced a system of prior notification of posting and Belgium developed an on-line declaration tool, which is also meant to ensure an effective monitoring of the phenomenon. This latter feature is shared by Denmark, which developed a similar initiative in the recent years and therefore provides a significant comparative case also in this respect.

The case studies have focussed on existing research and studies with a view to collect all additional data and information available at national level to integrate aggregate data which was collected using EU level sources. A special focus was devoted to highlight existing problems and issues that had emerged at national level on the posting of workers and to identify possible solutions put forward by national actors. In this perspective, two case studies were particularly devoted to analyse the experiences and the results of monitoring tools introduced in Belgium (LIMOSA) and Denmark (RUT-Register). In consideration of the lack of quantitative data sources, even at national level, a mainly qualitative approach was

followed. A number of interviews were carried out with the main social actors and stakeholders in the field of posting: public administrations, especially those responsible for regulating posting and for the enforcement of the existing regulations; employers and employer associations; and trade union representatives. The interviews cover the present state of play regarding posting (both in terms of economic integration and social cohesion), its regulation and enforcement; the issues raised by posting and possible existing problems which needs to be tackled either at national or at EU-level; the practice and the assessment of national answers to the issues raised by posting; a discussion of the possible revision of the legislative framework on posting at EU-level, with a view to address the issues related to posting which have emerged in the 15 years since the PWD.

The drivers of posting

The national case studies carried out for this report provide important insights, which supplement and better specify the analysis of aggregate data. Besides the evidence used to clarify the problems and issues illustrated in Section 1.2, the cases also show how the drivers of posting combine in a number of actual experiences and how their relevance can change over time.

Geographical proximity

The aggregate analysis indicates that geographical proximity is one of the main determinants which structure the distribution of inward and outward postings. This fundamental factor clearly emerges in the case studies. In Denmark, an important share of postings systematically concentrates in the southern regions of Fynen and Southern Jutland, which are close to both Germany and Poland, the main countries of origin of posted workers. In 2009, this area even surpassed the capital region of Copenhagen, with almost 40% of postings, while in general it is the second receiving area with more than 20% of posted workers. In Germany, the meat processing industry, where the presence of posted workers is reportedly high, has important locations in the Lander close to the eastern borders, like Brandenburg and Saxony. In France, nearly 60% of the pre-declarations submitted according to the French law on posting are concentrated in the cross-border regions in the North, North-East and South- East of France. This is linked to cross-border activities with Belgium, Luxembourg, Germany and Italy. The main origin and destination of posted workers to/from the UK is France, which accounts for around 40% of all postings to the UK and one third of all UK postings abroad over the 2007-2009 period.

Labour and skill shortages

Labour and skill shortages are other highly significant drivers of posting. While they are usually the main factors linked to outward postings from high labour cost countries, such as France and Germany (for Germany, Dribbusch 2010), they are also important in a receiving perspective. For instance, most of the relevant cross border activities performed through posting in France are linked to these divers and are associated with a well-established system of 'cross-border' firms, with a long lasting tradition of operation on the two sides of borders.

In this respect, the experience of Denmark seems particularly interesting. It must be underlined that, in the wake of the 2004 enlargement, the posting of workers was considered as a highly positive phenomenon because it helped to face labour shortages, especially linked to the ageing indigenous workforce, and it contributed to accommodate the economic boom, thereby avoiding inflationary pressures on domestic wages and salaries. The yearly overall macroeconomic positive contribution on the Danish GDP of migrant labour (which, it must be underlined, in the Danish debate, includes posting) was estimated in 2006 at DKR 4.2 billion,

or some EUR 565 million (Tranæs *et al* 2009, p. 137). In a sending perspective, Danish construction firms and workers took part and could significantly benefit of the German post-reunification construction boom in the 1990s and of the oil-driven Norwegian sustained economic growth. In sum, the positive implications of both inward and outward posting were appreciated by Danish actors.

This was reflected in a study on east European workers in the construction sector which estimated that around 13,000 posted workers and some 100 self-employed workers from central and eastern European MSs were working in building sites in the second half of the 2000s (Hansen et Andersen, 2008), out of a total domestic sectoral workforce of about 180,000 at that time. The research was based on interviews with 236 Danish construction companies which had requested and obtained the approval to employ eastern European residents, according to the transitional measures then in place. Some 80% of the surveyed firms were using foreign workers (both migrants and posted workers) with a view to face the general labour shortage at that time (2005-2007). An additional benefit firms were expecting was a reduction in labour costs. The majority of Danish firms which employed foreign workers reported a number of advantages since these workers were more willing to perform less attractive tasks and demonstrated more flexibility. Some problems were reported in terms of lack of knowledge both concerning health and safety regulations and practices and regarding building standards, need for more control and supervision, and language difficulties which made the organisation and the performance of work harder.

The broad appreciation of the contribution of migrant and posted workers to the Danish economy changed with the start of the economic recession in 2008. Increasing unemployment, especially in the construction sector, and the overall worsening economy, shifted the focus of the public debate on labour cost differentials and notably on the impact of the posting of workers on the 'autonomous' Danish system of industrial relations. The alleged presence of 'sub standard' terms of employment (with the meaning of terms of employment below the Danish collective agreements) and the related lack of a level playfield between Danish and foreign service providers emerged as key issues.

Labour cost

Labour cost differentials are always underlined as a basic component of the phenomenon of posting. Besides being identified as one of the main drivers of posting in general, labour cost is relevant in connection with other drivers. This is an important consideration, which has been highlighted in the aggregate analysis and has been stressed in the cases studies. All drivers influence posting of all countries at the same time, in both receiving and sending perspectives, and they imply the level and structure of postings in combination. So, even if the main driver of inward posting in certain situations is skill shortage, nevertheless labour cost – in connection with other factors such as geographical proximity – contributes to define and select the origin of this posting. For instance, even the high skilled German posted workers tend to move towards countries with relatively higher labour costs, so that the benefits of filling skill (or labour) shortages combine with cost-related advantages for utilising firms linked to comparatively lower labour costs.

In the case studies, there are indications on the wage differentials between indigenous and posted workers. Of course, it is difficult to compare the situations of workers, so that pay differences may reflect distinct characteristics of the workers involved. However, the pay gaps are usually quite high, so that even by taking into consideration the possible different situations in terms of skills and productivity, wages of posted workers would remain lower. In France, a report delivered by the French Senate in 2006 estimated wage differences between foreign posted workers and French workers to be around 50%. In Denmark, a study on the

construction sector indicated that, in the mid-2000s, workers from Eastern European countries had on average a salary lower than Danish building worker by 25-28% (Hansen et Andersen 2008, p. 9). A similar difference has been estimated for Germany by comparing the minimum wage levels with the actual wage levels in the construction sector. The average hourly gross salary in the building sector – EUR 17,11 (Federal Statistical Office) – is in fact 32% higher than the minimum wage for skilled workers and as much as 56% for the minimum wage of unskilled workers in West Germany. The actual pay differences can be even higher, as suggested by the reports about common infringements of minimum wage rules in the German construction industry (see for instance the German language section of the web site of the European Migrant Workers Union, EMWU¹³)

Despite such large difference in estimated wage levels in Germany, it is important to stress that in recent years a significant decrease in the number of postings was recorded in the construction sector, which is now less than half of the level of the late 1990s (source: SOKA Bau). This was due to the overall reduction in construction works for both the end of the post-reunification building projects and the impact of the recent recession. The total sectoral employment was 3.2 million workers in 1995 and declined to 2.2 million in 2010.

As regards inward posting, a compositional shift is apparently emerging in Germany, with the share of low-labour cost countries diminishing to the benefit of high-labour cost countries. Particularly striking is, for instance, the decrease in postings from Poland, which slumped from more than 40,000 at the end of the 1990s to significantly less than 20,000 in 2009. In the same period, the relevance of postings from some high-wage countries has increased, like Belgium, the Netherlands and Denmark (Eichhorst 2005). These trends seem to signal a relative weakening of the labour cost driver apparently in favour of geographical proximity and possibly other drivers, such as skill and labour shortages.

It is important to stress that the case studies clearly show that minimum wage systems, neither those setting nation-wide minima (like in the UK) nor those establishing sector specific collectively agreed minimum pay rates differentiated by job classification levels (like in the case of Germany), are able to eliminate the role of labour cost differentials in driving posting. Of course, if effectively enforced, minimum pay rates represent a floor for wages and can eliminate the most evident forms of wage competition, but the differences between minimum and actual pay rates as well as the application of distinct social security regimes do entail some room, at times significant, for labour cost competition. As long as such minimum pay rates represent the only mandatory constraints for domestic firms too, the same scope for wage competition should be available even among national businesses.

Market integration

The importance of the link between market integration and posting (which is clearly a two-way connection with self-reinforcing incremental effects) is forcefully depicted by the role of geographical proximity outlined above. Most of postings occurs precisely in the areas and between the economies which are better integrated. The case studies refer to outward posting and external trade as complement, especially on the case of capital goods and foreign direct investment for Germany. The relationship with Norway and its oil-driven 'booming' economy is mentioned to illustrate outflows of Danish construction workers. Another example can be found in the UK, where the high share of posted workers in the financial sector can be linked to the importance of London in the global financial market.

¹³ The European Migrant Workers Union (Europäische Verein für Wanderarbeiterfragen, EMWU) was established in September 2004 by Germany's Trade Union for Building, Forestry, Agriculture and the Environment (IG BAU). See the EIRO article, *European Migrant Workers Union founded*, EIRO 2004, DE0409206F.

Problems and issues

The case studies provide important indications about the problems and the issues linked to posting, especially with reference to the economic and social dimensions and to the problems of enforcement.

It is important to underline that all case studies highlight that the attention in the national debate and the concerns of domestic stakeholders about posting are exclusively concentrated on inward posting. Information on domestic workers posted to other countries is even more limited than on foreign posted workers. The few references that can be found at national level consider posting abroad as an opportunity for businesses and workers and a sign of the dynamism and strengths of the domestic economy. Another type of posting which does not seem to be problematic is intra-group posting in well-established multinational firms, especially in high-wage sectors. Therefore, the two types of posting which are typically at centre of debate and tensions are those linked to the provision of services through a contract with a user companies (which may entail intra-group posting when the service provider has a local branch in the receiving country) and temporary agency transnational posting.

The issue of unfair competition and 'social dumping' linked to inferior employment and working conditions of posted workers emerges prominently. In each case there is at least some reference to lower pay rates, longer working hours, poor working conditions – also in terms of health and safety –, poor living conditions – especially with reference to housing –, disproportionate deductions for accommodation and other forms of exploitation. Such reference is usually presented by trade unions in interviews and in union documents on specific situations, but it is also mentioned by labour inspectors and is sometimes identified in studies and official enquiries/documents. Unfair competition and social dumping are seen as producing job – and company – displacement on one side and highlight the need to strengthen protections for posted workers and reduce the pressure on employment and working conditions of domestic workers, on the other.

It is interesting to underline that the link between the posting of workers and unfair competition and social dumping is sometimes stressed also by SMEs. For instance in Denmark and France small firms in the construction industry, but also in other sectors such a temporary employment agency, underline that foreign undertakings can often exert a very strong competitive pressure only by virtue of using posted workers with lower wage levels and lower social security contributions obligations. In this respect, there seem to be a potential divergence between the interests of SMEs and large firms in the receiving perspective: whereas SMEs tend to compete directly with foreign service providers, large firms are more often among the users of posted workers which can obtain the advantages of posting in terms of increased allocative efficiency and of filling labour and skill gaps¹⁴.

The recent economic downturn, with the connected increase in unemployment and the possible reduction in the importance of skill and labour shortages, contributed to exacerbate tensions around such issues. The concept of job displacement has a very vivid and direct representation if we focus on individual cases, so that we can see, for instance, that in tendering procedures in the civil engineering and construction sector foreign subcontractors tend to be awarded contracts while domestic firms have great difficulties in copying with that competition – something which is in fact reported for France, Germany and UK. This effect is

¹⁴ Although existing evidence is very fragmented, data on the number of posted workers per posting available for France and Denmark (3-4 posted workers per posting) indicate that possibly small companies are often involved in the posting of workers. This can be true even if in certain sectors, like in the engineering construction industry, the role of large multinational companies is very important, since the subcontracting chain is extended and can include numerous SMEs at its downstream end. As a consequence, in a sending perspective, the benefits of posting may be enjoyed especially by SMEs.

similar to off-shoring, when a company closes down in a country to open/move production abroad. In a dynamic perspective, the assessment is much more difficult, because sectoral shifts and potential efficiency gains can in fact lead to job creation which may (partly) offset the 'static' loss. Of course, possible dynamic gains leave open the question on how to support the workers who do not get or lose a job to find another one.

Industrial disputes

The UK provides a number of cases where there have been disputes on the utilisation of posted workers in the engineering construction sector. In all cases, social dumping and lately the restriction of job opportunities for domestic workers were the issues at stake. Trade unions also contend the prevailing view that foreign contractors bring in the UK labour and organisational skills which are not available domestically. Drawing on their day-to-day practice in workplaces, union representatives believe that posted workers often lack the special skills required to operate on demanding and difficult building sites, like nuclear power stations. However, if it were skill shortages to drive the posting of workers, trade unions stress that particular attention should be devoted to develop such skills locally. According to the unions, the disputes on posting should not be regarded as contrasting the employment of foreign nationals, but rather as the effort to enforce fair employment standards and a level playing field between UK and foreign workers and contractors. In this perspective, the importance of focusing on skill development at local level is also underlined by UK employers.

The engineering construction sector represents a special case within the UK industrial relations system because of the presence of an industry-wide agreement¹⁵ (the National Agreement for the Engineering Construction Industry, NAECI) and of a high unionisation rate of around 80%. The major sectoral employer association, the Engineering Construction Industry Association (ECIA), is committed to the application of the national agreement throughout the industry. The NAECI 2010-2012 includes a set of guidelines for ensuring the application of the terms of the agreement also to non-UK contractors and to encourage foreign contractors to join ECIA. However, the national legislation implementing the PWD does not provide for the application of collective agreements (which, in any case, are not generally binding), but only of minimum legal standards, including the national minimum wage. Since the national minimum wage is below the minimum collectively agreed pay rates, this can give rise to significant wage gaps between domestic and posted workers in the engineering construction sector.

The first high-profile dispute on posted workers in the engineering construction sector occurred in late 2003. It concerned a project at a power station at Cottam, in the East Midlands, owned by the France-based EDF Energy. Through the subcontracting chain (the German-based RWE was the main contractor) some Portuguese companies were involved in the project and used Portuguese posted workers. Workers took unofficial industrial action and demonstrated in protest at UK workers being "unable to secure employment on the project due to being undercut by non-UK contractors and posted workers". Also sympathy action took place at other sites (NECC 2004). While the unions criticised the unofficial action, they shared the workers' concerns. The National Joint Council for the Engineering Construction Industry (NJC), a bipartite organism in charge of negotiating the NAECI and ensuring its application, intervened to stop the protest and guarantee that the agreement was correctly applied.

¹⁵ This is also true for a number of related construction sectors such as electrical contracting, building and allied trades, heating and ventilation, plumbing mechanical engineering, environmental engineering and demolition. Growing concerns about the potential impact of posting on industrial relations are growing in other sectors with nation-wide bargaining such as public services and rail transport.

The action prompted the intervention of EDF, which stated that the industry-wide agreement had to be applied throughout the site. An internal audit found some elements of violation: as a consequence, the contract with a Portuguese supplier was terminated and a second Portuguese contractor was given an advice to apply the NAECI. Some extra work was given to tender and this gave the opportunity for UK workers to be employed. A similar case occurred at the same site in 2006 when another unofficial strike was staged in support of Hungarian workers who were believed to be paid under the NAECI rate. The workers were posted by an Austria-based firm, SFL.

A quite different outcome than the first Cottam dispute was reached at a site owned by Castle Cement at Mold, in North Wales, where construction work was contracted to a Belgium-based firm, Pirson, which used posted workers. According to the unions, Castle Cement declined to implement the NAECI on "grounds of price". The NJC tried to obtain the application of the agreement by Castle Cement, but without success.

More recently, other high-profile cases occurred at sites at the Isle of Grain in South-East England in 2008, at Staythorpe, in the East Midlands, and at Lindsey in Lincolnshire in 2009. The first two cases involved the construction of power stations and Alstom was in both sites the general contractor; the third one concerned the building of an oil refinery and the general contractor was the US-based firm Jacobs Engineering. In all cases the issues at stake were both the possibility to provide employment opportunities for UK-workers and underpayment of posted workers employed by Polish (at the Isle of Grain) and Italian (at the other two sites) subcontractors. Trade unions claimed they had evidence that the posted workers at the Isle of Grain employed by a Polish subcontractor were paid 30% less than the NAECI rate. There were unofficial strikes and demonstrations. Eventually Alstom made a commitment that non-UK employees would be paid the NAECI rate. According to the ECIA, underpayment was due to involuntary misclassification of employees. The Polish subcontractor reviewed and reissued the contracts. Moreover, local workers were interviewed for jobs at the site. Unofficial strikes and demonstrations were also held at Staythorpe in protest of the exclusion of UK workers, since the Italian subcontractors had stated that they would use their workforce to carry out the work. Also in that case, the foreign subcontractors agreed to recruit a number of local workers. At the same site, the trade unions claimed that Somi, an Italy-based subcontractor, did not pay the NAECI rates to some of its 400 posted workers, despite the firm's commitment to do so. An independent audit of Somi's payroll found that some 20 workers had been underpaid by an average of EUR 1,300 per month over a significant period. ECIA found the situation "not acceptable" and reported that Somi had undertaken to take immediate corrective action. ECIA said the Somi case was an isolated incident and declared that there was "no evidence of widespread undercutting" of agreed rates."

The 2009 dispute at Lindsey oil refinery in Lincolnshire, owned by the France-based company Total, attracted most attention. The Italian subcontractor IREM planned to post Italian and Portuguese workers to do most of the work under the contract. The lack of employment opportunities for UK workers sparked an unofficial strike in January 2009 and sympathy strikes at other engineering sites. There were also allegations that IREM was paying lower pay rates than provided by the NAECI. The UK Advisory, Conciliation and Arbitration Service (Acas) helped solve the conflict and conducted an investigation on circumstances surrounding the dispute. A deal was signed in February 2009 to end the strike, which included the commitment to make available to UK workers around 100 jobs. Acas found no evidence that Total, Jacobs Engineering or IREM had broken the law in relation to the use of posted workers or entered into unlawful recruitment practices. Further, Acas received assurances from IREM that it would abide by the NAECI (Acas 2009).

Abuse and violations

The case studies illustrate a number of situations where the working conditions of posted workers appear as violations of the regulatory framework on posting. One of the irregularities indicated in the case studies is the extension of the weekly working hours, even beyond the legal maximum, without compensation, so that hourly wages are pushed down compared to their nominal level. Harder working conditions can also be reflected in higher accident rates.

In this case, references can be made to single high-profile cases. A relevant example is provided by the Bouygues Travaux Publics in the construction of a nuclear site in Flamanville concerning some Polish workers posted from a Cypriot subsidiary of an Irish temporary work agency specialised in construction engineering and related trades. The workers were found to have wages around half of those of French workers. The company was also accused of covering 38 undeclared accidents out of the 112 declared accidents. The same case was echoed in the public debate in the UK, where the unions were worried that the same subcontractors could be used in the construction of another nuclear site. Indeed, the presence of large contractors and sub-contractors in the engineering sector with EU-wide operations can facilitate the emergence of common practices violating workers' rights. At the same time, this also points to the possibility of building a transnational system of monitoring and enforcement and, in positive, it could help the diffusion of good practices. In this respect, it interesting to note that the issues around posting do not only refer to SMEs coming from low labour cost countries, but also involve large MNCs based in high labour cost countries.

Case studies report other abuse undermining workers' rights. For instance, bogus selfemployment represents a challenge to enforce the PWD and to effectively protect workers. Besides the construction sector, where bogus self employment is apparently frequent in most of the countries covered by the study (at least Germany, France and UK) and a more effective enforcement should be strongly ensured, the German case study shows that another sector where problems of enforcement are emerging is the meat processing industry.

Trade union reports about the meat processing industry in Germany point to a situation where in recent years a significant part of direct employment has been replaced by a variable combination of subcontractor posted workers, temporary agency posted workers, and self-employed foreign subcontractors (EFFAT 2011). In practice, often abattoirs and meat processing plants employ only a minority of the overall workforce while the majority of workers on site are part of the transnational provision of services. Long working hours, increase in workload and pace of work, deteriorating working conditions, including growing MSDs, are reported as emerging features of the sector in Germany. Some of these developments are linked to reorganisation and off-shoring of companies which move to locations in Germany which allows exploiting this kind of workforce composition based on posting and transnational service provision. Wage differences with domestic workers are quite high and absolute wage levels so low (allegedly down to around EUR 3 per hour) that Germany has become to be regarded as a low-wage country in the meat processing industry and competitors in neighbouring countries such as France and Belgium claim there are increasing forms of unfair competition involving German-located firms (UECBV 2011).

Public concern about the employment and working conditions of posted workers in the meat industry and its impacts on employment and the protection of workers' rights date at least back to the mid 2000s (<u>Deutscher Bundestag 2005</u>). Two cases cited in a recent conference involve the Germany's largest pig abattoir owned by B & C Tönnies in Rheda-Wiedenbrück, where only around 800 workers of the 4,500 total workforce are employed directly, while the remainder is provided by various eastern European service firms, and the Westfleisch's abattoir at Hamm in Westphalia, where of the about 1,200 workers only some 10% have a

direct employment relationship (Klaus-Harald Güster, NGG, *The German meat industry*, European Conference on "Investing in people – Fight precarious work", 3-4 May 2010).

The related deterioration of employment and working conditions contributes to the low attractiveness of employment in the industry for the local workforce. This encourages firms to further source workers abroad, while the role of industrial relations and collective bargaining is significantly weakened by decreased membership (and membership fees) and because of the (credible) threats by employers to have recourse to reorganisation or off-shoring, if labour costs are not sufficiently low. The absence of an industry-wide collective agreement for the meat processing sector in Germany makes it particularly difficult to refer to the protections granted by the national legislation on posting (AEntG), which introduces minimum pay rates by extending the coverage of sectoral agreements in certain industries. This is why one of the basic demands of trade unions in the meat processing industry is to introduce a national minimum wage.

Other cases of abuse are reported in the road haulage sector. These involve for instance France and substantially include the establishment of 'fake' foreign subsidiaries or transnational contractual relationships with the only aim to provide 'low-cost' workforce for French operations. Such practices recently acquired prominence in the public debate due to media reports on the activities of the Norbert Dentressangle group, a French major group in the road sector. In one case a French transport operator set up a subsidiary in Poland which recruited some one hundred drivers to perform road haulage in France. The usual schedule of Polish drivers included six weeks of work in France and one week of rest in Poland. The Polish drivers were working six days per week and, during their stay in France, they stayed in flats provided by the French company. The vehicles were owned by the French mother company; the Polish subsidiary rented the trucks from the mother company and then it rented them back while providing the posted drivers. The French courts could verify that a proper but disguised employment relationship was present between the French company and the Polish drivers, as the former organised and directed in all details the work of the latter (TRANSPO 2011). A similar case, involved another French company which established a subsidiary in Slovakia. The Slovak drivers were actually working for up to 15 weeks in France and were in any respects integrated in the mother company workforce. In particular, the French company entrusted the Slovak subsidiary to carry out its own transport contracts, while the foreign firm did not have any independent activity in Slovakia and all of its trailers were provided by the mother company. Again the foreign subsidiary did not show any independent entrepreneurial activity and was established with the only purpose to provide drivers at a lower cost to the French mother company (TRANSPO 2011). In other cases, the provision of drivers for on-going operations in France is organised through agencies. For instance, the case of agencies posting Turkish drivers to France for several months was reported in the national case study.

Also the very high level of posting from Luxembourg, for instance to Belgium and France, has been linked to the search of lower social security costs. The French national case study illustrates that this practice mainly involves posting through temporary work agencies. In 2010, the temporary work agency sector showed the highest number of pre-declarations of posting in France (14,336 out of 38,651, or 37% of the total – but it terms of working days it was only second to the construction sector with 14% of total working days compared to 46% of construction). It is interesting to note that 75% of pre-declarations in the temporary work agency sector come from Luxembourg (10,844 pre-declarations or some 80% of the total from Luxembourg) and that temporary agency transnational posting concentrate in the bordering Moselle district (61%). According to the interviews carried out for the French national case study, temporary work agencies based in Luxembourg post mainly French workers who never worked in Luxembourg in companies located in the Lorrain region. Such practice enables

firms to pay less social contributions and workers to get equivalent and sometimes even higher benefits. In addition to the lower social security costs, utilising firms can also benefit from the non application of provisions introduced by collective bargaining in the temporary agency sector in France, like the payment of the contribution for the vocational training of French agency workers.

Other forms of abuse concern the accommodation provided to posted workers by subcontractors. Apart from reports of very poor housing facilities and disproportionate deductions, which are rather common, it is also highlighted that housing expenses are often used to integrate the minimum pay rates that must be granted to posted workers. In 2006, there was a case in France where this kind of infraction was detected. At the electric power station building site in Porcheville, following a report by trade unions, labour inspectors found that a Polish subcontractor was in fact including housing benefits in the minimum wage, which is against the rules. Since the company did not respond immediately to an order by the French Labour inspectorate to pay integration, the case was reported to court and compensation was eventually obtained in 2008.

Enforcement

According to the case studies, the enforcement of the PWD represents a common concern of stakeholders at national level. Labour inspectors explicitly refer to widespread difficulties in checking the actual establishment of firms in foreign MSs, to qualify the grounds of posting in terms of the foreign habitual place of work and residence, and to verify terms of employment of posted workers, due to language problems, difficulties with foreign documents, lack of a supervisor of posted-workers on site, lack of information on conditions applicable in the sending MS, and slow cooperation by corresponding authorities in the sending MSs.

Trade unions, and often employers, stress the importance of strengthening the enforcement of rules on posting and demand stricter checks and controls. Such requests in many cases have to consider the lack of resources of inspection services, so that only a few controls can be made, even when, like in Germany, existing rules would require much broader and deeper monitoring of posting. Scarcity of staff, training and specialisation of inspection services on posting have been reported in France and Germany.

The German case study highlights that Finanzkontrolle Schwarzarbeit, the public body responsible for the monitoring the implementation of the Posted Workers Act, finds it often difficult to verify whether a foreign company posting workers to Germany is genuinely established in the country of origin or it was set up solely for the purpose of illegally posting workers abroad. Other problems are reported in the field of transnational cooperation. According to the interviews, there is scope for improvement in terms of effective collaboration, exchange of data and information and the transnational application of fines and sanctions.

In France, one of the main issues concerning posting is the difficulty to implement the provisions of the PWD. In this field, the public administration has undertaken a number of actions to improve the capacity of monitoring posting and with a view to improve transnational cooperation, especially through the establishment of bilateral agreements. In particular, in recent years the French Labour inspectorate stressed a number of difficulties in carrying out controls on posting, especially concerning practical problems (language difficulties, different document formats, lack of a reference person among posted workers, the short duration of posting), legal issues (the qualification of the employment relationship with very few pieces of information, knowledge of relevant foreign labour regulations), and administrative aspects (administrative work, slow and insufficient cooperation by foreign public administrations, problems in the transnational application of sanctions). It is interesting to highlight that part of the difficulties of enforcement are linked to the fact that

posted workers lack information about their rights and entitlements. As a consequence, measures aimed at improving the implementation of the PWD should not be focused on public administrations only, but should aim to involve and better integrate posted workers at workplace level.

Addressing the problems

The case studies present a number of ways to address the problems and the issues raised by the posting of workers. Since most of the public concern is focused on the protection of workers' rights and the enforcement of the regulation on posting, these are the two crucial areas where it is possible to identify potential solutions developed at national level by both the social actors and public authorities.

Collective bargaining

Voluntarist and autonomous industrial relations system are those where the activity of the social partners have contributed to develop contractual tools to deal with the challenges they face because posting represent an area which remains substantially outside the direct regulatory capacity of national bargaining systems. In fact, the full integration of posted workers would require the extension of representation to posted workers and foreign service providers as well as their direct coverage by collective bargaining. These inclusion strategies are difficult and have limited success rates, as the Danish experience shows with a trade union density rate of around 5% among migrants and posted workers and a collective bargaining coverage rate of less than 15% of foreign service providers. Therefore, in both UK and Denmark, beyond the pressure exerted by conflict in specific cases, a general indirect response has been sought by committing employers to subcontract work only under the provision that the industry-wide collective agreement is applied by service providers, including foreign firms.

In the UK, the issue of posted workers was at the centre of the 2010-2012 renewal of the industry-wide agreement for the engineering construction sector (NAECI). After difficult negotiations, the renewal incorporated a number of trade union demands on posted workers. In particular, the agreements includes an appendix on "Non-UK contractors and non-UK labour on engineering construction sites", which is a development of previous guidelines for members introduced by ECIA, the sectoral employer association. The Appendix states clearly that posted workers must be paid the same rates as UK employees and strictly in accordance with the NAECI. Moreover, it endorses another key request by trade unions and it seeks to ensure equal employment opportunities for UK workers on building sites, also in presence of foreign subcontractors.

The measures envisaged by the Appendix include early trade union involvement in tendering processes and meaningful consultations in the appointment of contractors; the obligation for main contractors to ensure that non-UK contractors observe the NAECI for relevant workers; the active support for membership of ECIA by non-UK contractors (and a number of them are indeed members of ECIA, notably some of the foreign suppliers involved in the above mentioned disputes); the provision to non-UK contractors of UK of information about health and safety legislation; the involvement of the UK public employment services in the preparation of new large projects in order to favour recruitment of local unemployed workers; the encouragement of non-UK contractors to enrol UK workers in they need extra workforce; the request to consider the possible special needs of non-UK workers. Moreover, the 2010-2012 NAECI provides for a stronger auditing process for terms and conditions of employment on sites, in order to ensure greater transparency and full compliance with the NAECI. Finally,

the agreement includes a provision for guaranteeing workers working away from home paid travel to return 12 times a year.

Similarly, in Denmark, the 2010 bargaining round for the construction sector has seen the request by the trade union to establish some sort or subcontracting-chain liability system for the main contractors in order to ensure that all subcontractors, including foreign service providers, apply the relevant industry-wide agreement. The Danish Construction Association (Dansk Byggeri) rejected the unions demand, maintaining that such system would be in contrast with EU rules on competition. Some different points of view were also present within the trade unions, since it was debated whether such kind of liability should be introduced by legislation and whether a pre-requisite for subcontracting-chain liability was the establishment of a national minimum wage. Both social partners expect that the discussion on joint liability systems will emerge again in the 2012 renewal. It is worth noting that, in the meantime, such a provision has been effectively introduced in a small segment of the construction sector as, at the end of January 2011, the agreement between the United Federation of Danish Workers (3F) and the employer association Danish Craft (DHV) introduced the obligation for the employer to contract out work only to companies covered by a Danish collective agreement. This agreement covers around 500 small and medium-size enterprises in construction, handicrafts, and the wood industry (EIRO 2011, New agreement to combat social dumping, DK1103019I).

In line with the basic features of the Danish autonomous industrial relations system, even the Danish adaptation to the ECJ Laval judgement has relied on the inclusion of foreign service providers in collective bargaining, despite the limitations the ruling seems to entail for the utilisation of industrial action. In 2008, an amendment of the national law on the posting of workers was passed with a view to ensure the possibility for Danish unions to use industrial conflict to put pressure on foreign service providers and obtain the application of Danish collective agreements and thereby granting equivalent conditions for posted workers. Industrial action is possible only if the foreign company is aware of the specific content of the agreement to be applied and if the deal was signed by the most representative organisations in the relevant industry and covers the whole Danish territory. In order to fully implement the legislative provisions, social partners should clearly identify in collective agreements the regulations and benefits which are relevant for posted workers. The employers have however declined to do so and the unions have identified the parts of the collective agreements in the relevant sectors which should be applied to posted workers.

Information provided by the Danish Ministry of Employment on *Working in Denmark* clearly states that "foreign enterprises that post their employees to Denmark should be aware that Danish trade unions will try to obtain a collective agreement on the pay and working conditions for the work that is carried out in Denmark" and that, if they refuse to sign an adoption agreement or to negotiate a specific deal, the "enterprise should then be aware that the trade union will take industrial action", which may include strikes, boycotts and sympathy actions. In fact, the Danish central social partners – LO (the Danish Confederation of Trade Unions) and DA (the Confederation of Danish Employers) – have agreed that "posted employees from other EU Member States should have the same rights as their Danish colleagues in similar jobs with regard to pay and working conditions". Accordingly, most major contractors in the Danish Building industry, when making agreements with subcontractors, include a special clause which binds sub-contractors "to pay their employees in accordance with the contractual terms laid down for the building and construction sector in Denmark". Indeed, the "social partners recommend that foreign employers join the relevant Danish employers' organisation, thus committing themselves to respect Danish pay and

working conditions"; for instance, "the Danish Construction Association has many foreign enterprises among its members" (Danish Ministry of Employment 2009, p. 8).

Besides these examples of regulation by collective bargaining, all the case studies illustrate that monitoring by trade unions is very important and is a crucial component in monitoring employment and working conditions at workplaces. It can become particularly important in certain situations, but everywhere unions have proved to be a key element in pointing to potentially illicit situations and they are also important in supporting posted workers in individual disputes. A strengthened role of trade unions in ensuring that posted workers are granted appropriate employment and working conditions was suggested, for instance, in a recent report by the European Affairs Committee of the French National Assembly (Assemblée Nationale, *Rapport d'information sur le détachement des travailleurs*, February 2011)

Monitoring and administrative tools

Monitoring tools in Belgium and Denmark were introduced in order to improve the quality of the information on posting and mainly to enhance the enforcement of regulation and better contrast abuse and violations. The LIMOSA system provides an important and integrated dataset that can be used by the different public administrations which are responsible for the enforcement of labour and social security regulations in order to concentrate inspections according to a risk assessment. This has reportedly improved the cost-effectiveness of checks and controls and increased detection rates of violations.

In Denmark, the RUT-Register was eventually introduced following the unsatisfactory results of other monitoring tools. The recent introduction of the online system and of the joint liability of utilising companies to check effective registration of the foreign service providers, like in the case of LIMOSA, are considered important steps in the direction of respectively reducing the administrative burdens for posting firms and strengthening enforcement of rules.

It is important to note that the RUT-Register is also meant to enhance the autonomous capacity of social partners to regulate the employment of posted workers. In fact, the RUT-Register allows trade unions to access information on the activity of foreign service providers in Denmark, in the same way as the CVR-system provide details on companies established in Denmark. Trade unions are thus able to approach foreign service providers with a view to demand the application of collective agreements. Whether this feature can effectively support the inclusion of foreign service providers in the autonomous Danish labour relations system or rather may discourage registration by foreign operators, as some observers have underlined, will be seen in the future.

At this stage, it is interesting to see that both public administrations and the social partners are quite confident that the present regulatory and enforcement framework shall both preserve the Danish autonomous system and effectively address the issues and problems raised by posting. In fact, the changes in the Danish Act on Posting should, on one side, ensure the viability of industrial action and therefore confirm the 'Danish approach' to the regulation of the employment relationship of posted workers. On the other side, the renewed RUT-Register, with the introduction of the online procedure and the establishment of the joint liability of utilising Danish firms, should enhance enforcement. The RUT-Register should in fact provide relevant information to enforcing authorities with a view to effectively fight abuse and violations and contrast illegal transnational activities. In the stakeholders' view, such promising national arrangements are then complemented by the start of the pilot project of the IMI module on posting which should improve transnational administrative cooperation and contribute in this way to further strengthen the enforcement of the rules on posting.

Besides the potential of monitoring tools, the case studies draw the attention on additional administrative initiatives which can contribute to improve the enforcement of existing regulations. France, for instance, has tried to develop specific measures and a methodological support for labour inspection services especially devised for the posting of workers. Special guidelines, the translation of relevant documents, the activation of training initiatives and the implementation of European projects to exchange best practices are measures which have been recently taken in France. Also a network of regional liaison offices has been established alongside the central national office (Strasbourg for Germany, in the North of France for Belgium, in Perpignan and Bayonne for Spain, in Nancy pour Luxembourg and in Chambéry for Italy) in order to improve the provision and exchange of information on posting. Several bilateral agreements have been signed in recent years to support information exchange and better enforcement with Germany (2001 and 2008), Belgium (2003), Netherlands (2007), Bulgaria (2008), and Spain (2010), while some others are still under negotiation (notably with Luxembourg and Poland)

The recent Rapport d'information sur le détachement des travailleurs of February 2011 prepared by the European Affairs Committee of the French National Assembly and mentioned above includes a number of proposals regarding possible interventions in the regulatory framework on posting, in order to cope with the present difficulties in protecting workers' rights and ensure enforcement. Such measures include interventions to strengthen the application of collective agreements, the introduction of a social clause in public tenders, the introduction of a joint liability scheme between main contractors and subcontractors, clearer criteria to distinguish between employees and self-employed workers, and the protection of human dignity in terms of working conditions and housing. Besides such provisions, however, the report devotes great attention to the administrative dimension of enforcement by underlining the importance of closer and more effective cooperation between all the relevant national enforcement bodies, of the circulation of information between MSs, including with a view to fight letterbox companies, of improved information systems for workers and firms on the conditions applicable to posted workers, of the integration of a specific role for trade unions in the monitoring and enforcement systems, and of the introduction of adequate sanctions which can be applied at trans-national level.

The position of the stake holders and the policy options

In general, the case studies show that there is a widespread dissatisfaction with the implementation and enforcement of the PWD and the need for action emerge as a common element across cases and stakeholders, of course with varying degrees of urgency and different focus. The only notable exception is the UK. Here trade unions demand a change in the rules of posting and focus their attention on national-level regulation, notably by asking the establishment of collective agreements as a source of minimum protections as for Art. 3.1 PWD, and, as far as the implications of ECJ rulings are concerned, they request that the possibility to use strikes in disputes over posting be confirmed. The employers, especially the Confederation of British Industry (CBI), are satisfied with both the content and the implementation of the PWD, while the government is especially concerned with avoiding further red-tape for companies and therefore it is not particularly keen on intervening in the field of posting with new regulations.

Despite the common demands for intervention, stakeholders maintain that any new measures must be carefully considered, in order not to 'worsen' the present balance of interest. While this position is generally voiced by employer representatives, notably for fears of new restrictions and administrative burdens, in some cases, like in Denmark, unions share such

attitude, for the opposite concern that the new interventions – including in the field of the right to strike – may imply a reduction in the protections of workers and further challenges for the Danish autonomous system of labour regulation. In fact, Danish stakeholders, despite the relevance of posting in the national debate, are the most cautious in supporting any legislative interventions, essentially because they are confident that the present situation at national level enables the social partners and the public authorities to effectively regulate posting.

Turning to the content of the possible legislative review of the PWD, trade union representatives are more supportive of substantial interventions, also in the areas covered by Art. 1-3 PWD; however, the strengthening of the enforcement of the PWD is indeed a quite general request, with the qualification by the employer representatives that it should take place with the lowest costs and with the lowest possible barriers to transnational service provision and by the trade unionists that it should be accompanied by strengthened worker protections.

Concluding remarks

The case studies underline that the posting of workers in the framework of the transnational provision of services presents a number of critical aspects. This is essentially because posting by definition lies, at least partly, outside the scope of the regulatory capacity of national actors, both in legal and practical terms. While it certainly brings important business opportunities for posting and utilising firms, its peculiar regulatory framework, on one side, confronts national actors with new challenges and, on the other, opens room for opportunistic and elusive behaviours.

This second feature – the room for opportunistic behaviours basically linked to information asymmetries and weak monitoring and enforcement tools – operates as a multiplier of the concerns of social actors committed to protect the interest of workers and of public authorities responsible for the enforcement of labour and social security legislation. In order to redress such situation, irrespective of whether changes in the substantive regulation of posting are considered useful, it is important to act for closing such information asymmetries and strengthening monitoring and enforcement tools. Infringements and violations in the area of posting are not dissimilar of what happens with undeclared work and irregular employment, sometimes involving migrant workers, but they are more difficult to detect and sanction because of their often 'social seclusion' and their special regulatory regime, which requires, among other things, the cooperation of different public authorities, both within and across national borders.

More information on posting is needed; a better integration of posted workers and transnational service providers in the social and economic systems of the receiving countries can be greatly useful to avoid abuse and violations, strengthened cooperation between public administrations is essential to make the regulatory framework effective. Not all the issues raised by posting can be solved by such measures. The challenges represented by increased transnational competition, which can also involve some degree of labour cost competition, will remain, both for domestic production systems and for industrial relations and the regulation of labour. But, as long as social actors and public authorities have the instruments to monitor and ensure that common minimum protections are effectively enforced, such competition will operate in an environment where domestic and foreign service providers operate under comparable and fair conditions. In this perspective, posting can play an important role in the integration of European economies and societies.